HITACHI
Inspire the Next

C47-WD8000
C57-WD8000

- Thank you for your purchasing **HITACHI** projection TV products.
- In order to use the Rear Projection TV properly, please read this instruction manual carefully before using it.

CONTENTS

SAFETY TIPS

In order to use this TV safely, you must pay attention to the notice shown below.

This symbol indicates forbidden actions.

This symbol indicates additional cautions (including warning).

This symbol indicates required actions.

Refer to the Power Supply as indicated on the rating label pasted at the back of the TV set.
Do not use the TV outside the specified voltage range.
It may cause a fire or an electric shock.
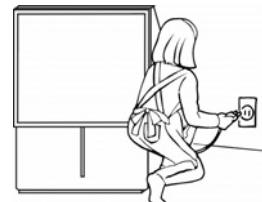
Never insert or remove the power plug with wet hands. This may cause electric shock.
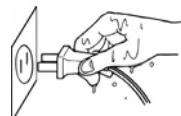
- Do not overload wall outlets and extension cords as this can result in fire or electric shock.
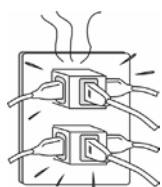
- Do not place any objects on the cord or allow it to overpass. If the cord or plug is damaged, please cut power supply immediately, then contact a service technician for inspection.
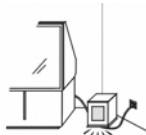
- Do not apply excessive force to the power cord.
- Do not allow the power cord to overheat as this may cause damage.
- Do not pull on the power cord when removing the plug from the outlet, please hold the plug firmly when removing it.

- **Do not place the TV into a closet or bookshelf where the ventilation is poor.**
- **Do not cover the TV with cloth or other objects.**
- **Do not place the TV with its screen facing upwards, or on its side. Allow sufficient space between the TV and walls.**

Ensure that there is sufficient ventilation and that vents are unobstructed to prevent the buildup of heat inside the TV, or else, it may result in a malfunction.
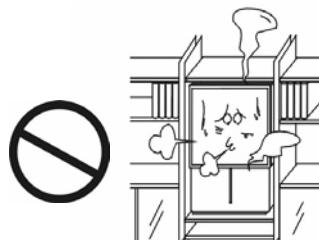
- **Do not place the TV on an unstable cart, stand or table.**
- **Do not place the TV in an unstabilized location such as on a bed, sofa, etc.**
- **Do not use the TV in locations exposed to high humidity levels such as close to a bathtub, washbowl, kitchen, washing machine, swimming pool or moisture, etc.**

Please always keep the TV in a dry place. If the TV gets damp, it may cause a malfunction.

SAFETY TIPS

• **Do not place the TV near heat source (such as a radiator, stove etc.) or a place where sunlight shines directly on the screen.**

   Overheating will cause failure of the TV.
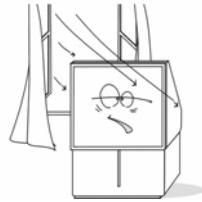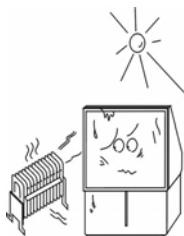
   • **Do not place the TV in a dusty place or exposed to rain.**
   Since accumulated dust inside the chassis may cause failure of the set when high humidity persists.

• **Do not place containers filled with liquids or other objects, e.g. house plant, vase, tea sets, etc.**
   In case liquids are spilled inside the TV，please remove the plug from the wall outlet immediately and contact a service technician.

   In addition, if rubber or vinyl products remain in contact with the cabinet or screen of the TV for a long time, the TV surface may get damaged or a stain may result.

• **Do not insert objects or pour water inside the TV from ventilation holes and other slots.**

   Be especially careful that children do not insert objects in the TV, such as coins, nails, clips, toys, etc.
   If these objects drops inside the TV, turn off the TV and remove the power plug from the outlet immediately and contact a service technician.
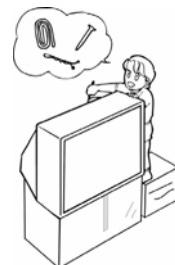
• **Do not climb or sit on top of the TV.**

   Do not stand or hang on the TV.
   It may result in the TV falling over, damaging, the screen broken etc. or causing an injury.
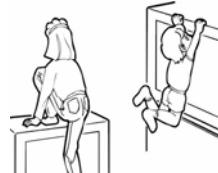
• **Avoid any kind of impact to your television.**
   Be especially careful not to damage the screen face.

• **Do not attempt to touch the screen, marks may result.**

SAFETY TIPS

- **In order not to damage the parts in the set, please unplug and remove the outdoor antenna connection during lightning storms.**
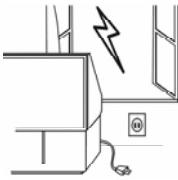
- **When going out or your TV is set to remain unused for a long periods of time, please turn off the television and unplug it from the wall outlet.**

  Accumulated dust on the plug or the humidity may cause a fire or electric shock due to reduced insulation on it. So when the TV won't be used for a long period of time, be sure to remove the power plug from the wall outlet.
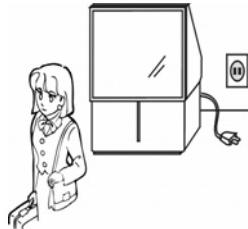
- **Do not disassemble, repair or modify the TV by yourself.**
  To prevent shock, disassembling the cabinet or touching the parts inside the TV by other than professional person is prohibited.

Precautions when moving
- When moving the TV, be sure to remove the plug from the wall outlet and disconnect the aerial cable, audio/video cable.
- As this TV is heavy, wherever it is moved, at least two people are required to transport it safely.
- Do not move the TV forcefully as it may leave scratch marks on the floor.
- Be careful when moving the TV. Avoid any bumps onto the screen.

Cleaning
1. Before cleaning the TV, remove the power plug from the wall outlet.
2. Do not use solvents such as volatile substances, diluent to clean the TV. These solvents may distort the cabinet and screen or damage its finish.
3. Do not use vacuum cleaner, polish, sand paper to clean the cabinet or screen of the TV.
4. If accumulated dust cover the cabinet or screen, please use a soft, dry cloth to clean.
5. Do not directly use liquid or an aerosol sprays to clean the cabinet of the TV.
6. Do not use the detergent directly on the TV if it is dirty.
   － Please use a clean soft cloth moistened with water to clean it.
   － Then wipe with a dry soft cloth.
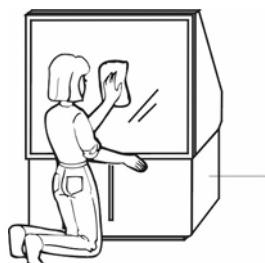
SAFETY TIPS

Moisture Condensation

If the room temperature suddenly rises or falls (e.g. the TV is moved from a cool place to a warm place), condensation may occur on the screen or lenses resulting in picture fading or color distortion.
In such case, please wait a while for the condensation to evaporate. The sound and picture will be restored to normal.

• Precautions on stationary images

This TV is designed to watch 16:9 (widescreen) picture. If you watch TV programs, please select such proportional active images, or by setting the aspect mode to display such proportional active images on your screen.

Avoid displaying stationary images on your screen for an extended period of time. Some bright and stationary patterns generated by computer displays, video games or multi window, etc. can cause permanently ingrained on the picture tube. Should you wish to display still images, it is always advisable to reduce the brightness and contrast settings.
This damage is not protected by your warranty as it is the result of misuse.

Maintenance

• If the set does not work properly, and you are unable to restore normal operation by following the "A guide to simple problem solving" section in your Instruction Manual, please unplug the set and consult service personnel.

• If the TV is dropped or the cabinet is damaged, remove the power plug immediately and contact a service technician for inspection.
• If there are smoke or strange smell from the TV, please remove the power plug from the wall outlet immediately and contact a service technician for inspection.

BEFORE USING THIS REAR PROJECTION TV

Note

This is not an integrated digital TV. To watch digital broadcast programs (if available), you have to purchase a Digital Set-Top Box that will receive and decode digital broadcast signals and input to the TV via the component input terminals.

Location

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows a free flow of air to and from the perforated back cover of the set.

Do not place the TV where temperature is excessively high, for example in direct sunlight or near a heating appliance, etc.

The best spot for viewing

The major benefit of the TV is its large viewing screen. To see this large screen at its best, please test various locations in the room to find the best spot for viewing. The following gives some suggestions.

The best picture and audio performance are obtained directly in front of the TV and about 2.5 to 4.5 meters from the screen. Picture brightness decreases as the viewer moves to left and right of the receiver.
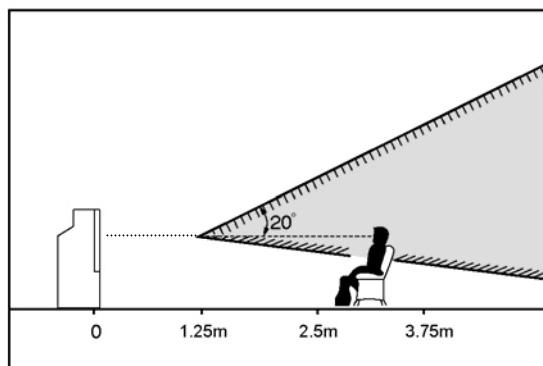
Best vertical viewing angle
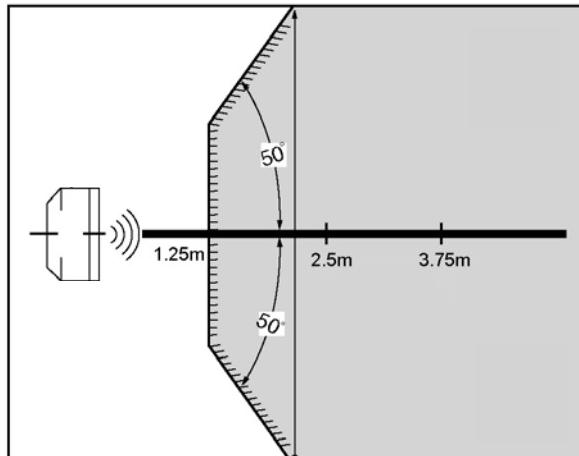
Best horizontal viewing angle

Note: Do not put magnetism source such as external stereo system close to the TV, as the picture distortion may occur under magnetism from the speakers. Please move the stereo system in locations where the picture will not be affected.

BEFORE USING THIS REAR PROJECTION TV

Connect the power cord and the antenna

Please read the rating label pasted at the back of the TV set carefully, and then insert the plug into the power outlet conformity to the rating label. Optimum reception requires that an outdoor aerial or CATV system must be used. Meanwhile, please note that a good antenna adaptor is necessary. See the following diagram.
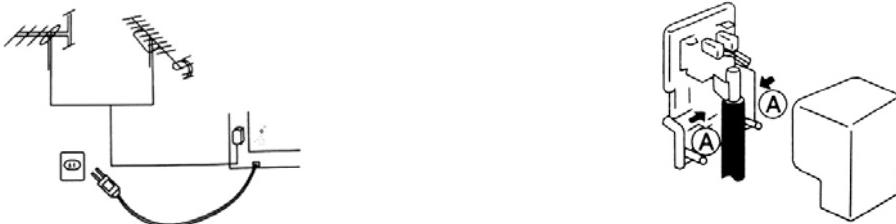
Precautions when connecting the antenna
① When you use an outdoor antenna instead of CATV system, avoid erecting in locations where there are elevated wires or other electrical circuit.
② When choosing an outdoor antenna make sure the groundings are correct.
③ Please use a coaxial cable that is free from interference to connect the antenna. Avoid using a parallel feeder wire as interference may occur, causing reception to be unstable and stripe noise to appear on the screen. For safety, install an external aerial conformity to AS 1417.1(in Australia only).
④ Clamp section A using pliers when installing the coaxial cable. If other types of adaptors are used, be sure that the core and shielding are good.
⑤ Avoid using indoor aerial as this may be affected by interference.
⑥ Keep the power cord as far away from the antenna wire as possible.

Insert the batteries

Insert the batteries into the remote control unit. Under normal use, the life of the batteries is approximately one year.

① Open the battery cover of the remote control unit by pushing the notched part of the cover with your fingers.

② Insert the batteries, paying special attention to their polarities.

③ Replace the cover.
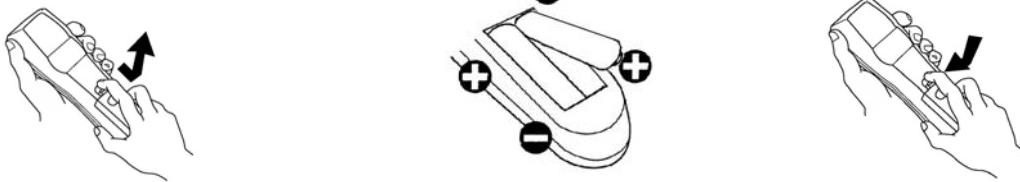
Precautions when using the batteries
① Do not use old and new batteries together.
② Do not use different types of batteries (for example, Manganese and Alkaline batteries) together.
③ Remove the batteries from the remote control unit if you do not intend to use the unit for long periods of time. Otherwise the batteries may leak and cause damage.
④ Do not throw the batteries into the fire.
Precautions when using the remote control unit
① Do not drop the remote control unit or subject it to physical shocks.
② Keep the remote control unit dry. Wetting it may cause the unit to malfunction.
③ Replace the batteries with new ones when the operating range of the unit is shortened.

FUNCTIONAL PARTS

Control panel and side panel

POWER button

POWER indicator

Remote control sensor

BRIDGE MEDIA status indicator

PC INPUT terminal

HEADPHONE jack

Side panel input jacks
(For AV5 input)

TV/VIDEO selector

VOLUME UP/DOWN
buttons (When the menu
appears on the screen,
press **VOL◄** / **VOL►**
buttons to select the
menu left and right.)

PROGRAM UP/DOWN
buttons (When the menu
appears on the screen, press
PROG ▲/ PROG▼ buttons
to select the menu up and
down.)

MENU/RETURN button

MAGIC FOCUS button

BRIDGE MEDIA
INPUT terminals

USB slot

SD memory card slot

Note: Before using these input jacks, please refer to the INSTRUCTION MANUAL on page 38,60 and 61.

FUNCTIONAL PARTS

Rear panel

Audio/Video input terminals 3,4

Antenna terminal

Audio/Video input & Component
input terminals 1,2

Monitor output
terminals

MONITOR OUT INPUT 4 INPUT 3 INPUT 2 INPUT 1

HDMI

S-VIDEO

Y/VIDEO

P_B/C_B

P_R/C_R

VIDEO

IR BLASTER

(MONO) (MONO) (MONO) (MONO)

L
AUDIO
TV AS CENTER
R
FIXED/VARIABLE

TV AS CENTER input jacks

Fixed/Variable Audio output
terminals

HDMI
(High Definition Multimedia Interface)

IR BLASTER output jacks

**Note: Before using these rear panel jacks, please refer to the INSTRUCTION MANUAL on page 62-65.**

FUNCTIONAL PARTS

On the remote control unit

POWER button (Page 12)

AV NET button (Page 45)

TELETEXT buttons
AV direct select buttons (AV1~AV5)

BRIDGE MEDIA buttons
(Page 38-41)

MULTI PICTURE buttons
(Page 33-35)

Program selector buttons

Program up button
Page up button
(In TELETEXT mode)
(In CH SURF 12 mode)

Program down button
Page down button
(In TELETEXT mode)
(In CH SURF 12 mode)

MENU button (Page 13)

RETURN button
(Page 13)

See the remark.

CH SURF button
(Page 36,37)

RECALL button

TV/VIDEO selector button
(Page 58)

MUTE button
(Page 58)

Stereo/Mono/
Bilingual (I/II) button
(Page 58)

PICTURE mode button
(Page 57)

AUDIO mode button
(Page 57)

P.SIZE button
(Page 54-56)

DVD buttons (Page 57)
*Note: For selected brands of
DVD player only.

FREEZE button
(Page 33, 37)

Remark:

The **ENTER** button is used to set or confirm MENU, please see page 13 for details. The ▲P+ ▼P- ◄‒ ► +‒ buttons are used as up, down, left and right cursor buttons. Alternatively, ▲P+ / ▼P- can be used as program up and down buttons and ◄‒/► +‒ as volume down and up buttons. The characters "▲ ▼ ◄ ► cursor" shown in this instruction manual will be referring to the ▲P+ ▼P- ◄‒ ► +‒ buttons.

GETTING STARTED

Power on/off

TO TURN ON THE POWER

Press the **POWER** button on the TV set. The power indicator will light up to indicate that the power is on.

WHEN THE SET IS AT STANDBY

The TV will be in standby mode and the blue power indicator becomes dimmer if the TV set is turned off using the ⏻ button on the remote control unit. This indicates that the TV is not powered off completely and is in low power consumption mode, waiting for your new command at anytime.

You can turn on the TV set using the ⏻ button on the remote control unit. The picture will appear in a few seconds. You can also press the **PROG ▲/ PROG▼** buttons on the side panel to turn it on.

TO TURN OFF THE POWER

Press the **POWER** button on the TV set to turn off it. The power indicator will go off.

⚠ **CAUTION:** **If you are not going to use this set for a long time, turn off the set using the POWER button on the TV set and disconnect the plug from the power outlet.**

GETTING STARTED

Instructions for operating menu

● Before watching the TV, please familiarize yourself with this method to use the menu function of this TV.

● Instructions in this manual are based on using the remote control unit. The words or symbols with frames refer to the buttons on the remote control unit.

● The Chinese characters on the TV screen are supplied by Rico Company. The logos and symbols used in this instruction manual are intended for explanation purposes, they might differ from those shown on the TV.

1. **Menu:** After the power is on, press the MENU button to enter the menu screen which shows a list of optional main adjustment items, such as **Picture**, **Audio**, **Timer**, etc.
2. **Adjustment items:** After a main adjustment item is "selected" and "entered", the screen will enter into the selection and show a list of related optional sub-adjustment items. After a sub-adjustment item is "selected" and "entered", it may enter the next stage of sub-menu display until the last stage of the adjustment item is entered. When an adjustment item is selected, the characters of the adjustment item will be highlighted and usually accompanied with a ► mark.

Common symbols in menu display

|	Symbols	Description
1	⊖ Select	This symbol is displayed at the bottom of the menu, indicating that you can select the adjustment item on the menu by pressing the ▲ or ▼ cursor buttons on the remote control unit.
2	ENTER Set	This symbol is displayed at the bottom of the menu, indicating that you can enter the adjustment item highlighted by pressing the ENTER button on the remote control unit.
3	◑ Set	This symbol is displayed at the bottom of the menu, indicating that you can adjust the selected item by pressing the ◄ or ► cursor buttons on the remote control unit.
4	⓪-⑨ Set	This symbol is displayed at the bottom of the menu, indicating that you can enter the number you desired when pressing the number buttons (0 – 9) on the remote control unit.
5	Reset	The characters **Reset** is displayed in the menu, indicating that you can return the current menu setting to the factory default setting by pressing the ENTER button on the remote control unit.
6	RETURN Return	This symbol is displayed on the menu, indicating that you can return to the previous page by pressing the RETURN button on the remote control unit.

3. You can stop and exit from the menu operation by pressing the MENU button anytime. If there is no operation in the menu after some times, it will automatically exit from the menu screen..
4. If the item in the menu is shown in grey, it means that it cannot be adjusted.

GETTING STARTED

Selecting the on-screen display language

You can choose from two different languages (Chinese and English) for the on-screen displays. When necessary, you may change the displayed language following the procedures below.

1 Press the MENU button to display menu as shown on the right.

```
Picture          ▶
Audio
Timer
Function
Setup
⊖Select ENTER Set
```

2 Press the ▲ ▼ cursor buttons to select the **Setup** option as shown on the right.
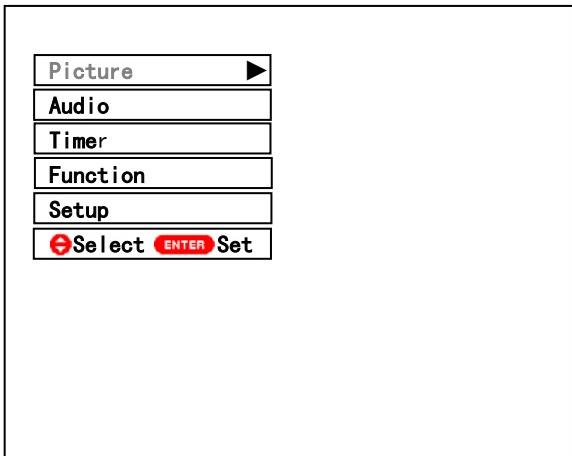
```
Picture
Audio
Timer
Function
Setup            ▶
⊖Select ENTER Set
```
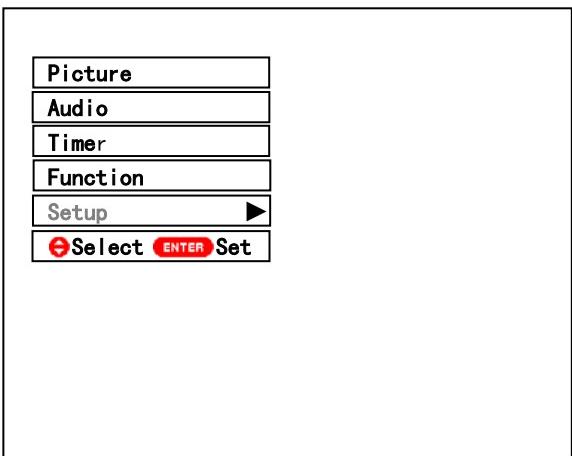
3 Press the ENTER button to enter the **Setup** menu. Press the ▲ ▼ cursor buttons to select the **Language** option (shown on the right), then press the ◀ ▶ cursor buttons to select the desired language: 中文(CHINESE) or **ENGLISH**.

```
Setup            ▼
   Preset
   Easy Preset
   Auto Link
   AV NET
   Speaker          On
   Audio Out        Fixed
   Language    ▶    中文  ENGLISH
   Text Language    EAST EUROPE
   ⊖Select ◑Set RETURN Return
```
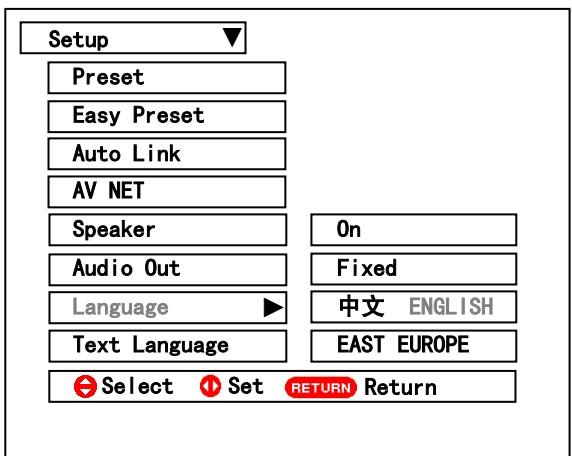
4 Press the RETURN button to return to the previous screen, or press the MENU button to quit.

GETTING STARTED

Easy Preset

It becomes convenient for the customers to program the TV using the remote control unit and detailed OSD of the TV set. Please follow the procedures below to start tuning.

1 Press the MENU button to display menu. Press the ▲ ▼ cursor buttons to select the **Setup** option.

```
┌─────────────────────┐
│ Picture             │
│ Audio               │
│ Timer               │
│ Function            │
│ Setup            ▶  │
│ ⊖Select ENTER Set   │
└─────────────────────┘
```
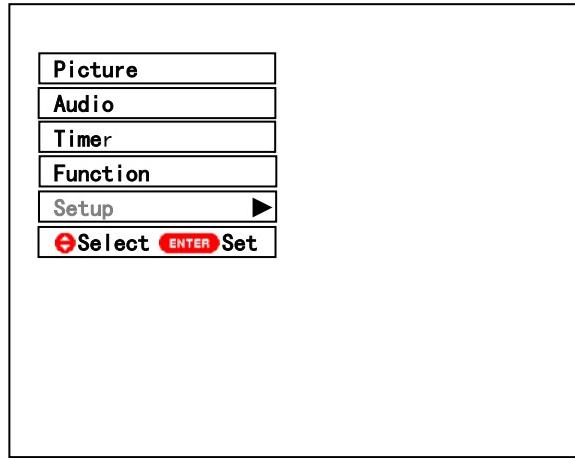
2 Press the ENTER button to enter the **Setup** menu. Press the ▲ ▼ cursor buttons to select the **Easy Preset** option.

```
┌──────────────────────────────────────┐
│ Setup            ▼                     │
│   Preset                               │
│   Easy Preset    ▶                     │
│   Auto Link                            │
│   AV NET                               │
│   Speaker            On                │
│   Audio Out          Fixed             │
│   Language           中文  ENGLISH     │
│   Text Language      EAST EUROPE       │
│  ⊖Select ENTER Set  RETURN Return      │
└──────────────────────────────────────┘
```
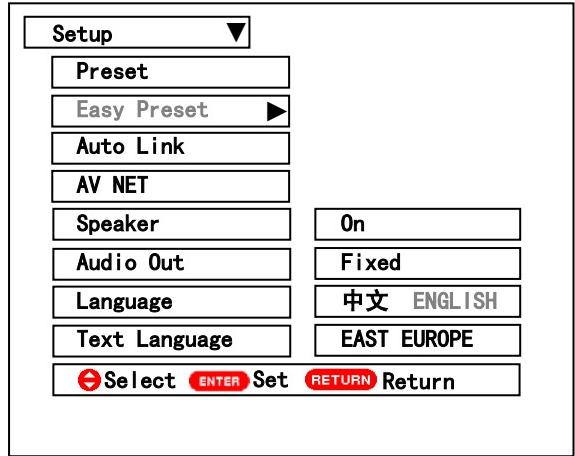
3 Press the ENTER button to enter the **Easy Preset** menu. Press the ▲ ▼ cursor buttons to select the **Sound System** option，then press the ◀ ▶ cursor buttons to select the required sound system in your area or set it to the **Auto** mode (shown on the right).

Now press the ▲ ▼ cursor buttons to select the **All Program** option, then press the ENTER button to begin the auto tune procedure. The character **Searching** appears at the bottom of menu, and the TV will begin the auto search procedure and store all signals available in the area or CATV.

You can interrupt it by pressing the ENTER button in the process of searching.

```
┌──────────────────────────────────────┐
│ Easy Preset     ▼                      │
│   Sound System  ▶    Auto              │
│   All Program        001:048MHz        │
│  ⊖Select ⊕Set  RETURN Return           │
└──────────────────────────────────────┘
```

The set will exit menu display mode automatically after searching is finished.

Notes:（1）If you want to arrange the programs obtained by **All Program**, please refer to the **Tuning** section on page 23.

（2）If your equipment (such as VCR, GAME MACHINE) only has RF output, connect it with RF cable into the antenna input of the TV set, and refer to the **Tuning** section on page 23 for presetting.

（3）When you are in video mode (AV1, AV2, etc.), accessing the **Easy Preset** menu will enable the TV to switch to RF mode automatically. This is normal.

ON-SCREEN DISPLAY MENU【PICTURE MENU】

Picture Menu

Picture menu allows you to adjust various picture settings such as brightness, color, contrast and sharpness. You can also adjust the settings for color temperature, dynamic contrast, etc. Please follow the steps below.

1 Press the MENU button to display menu.
Press the ▲ ▼ cursor buttons to select the **Picture** option as shown on the right.
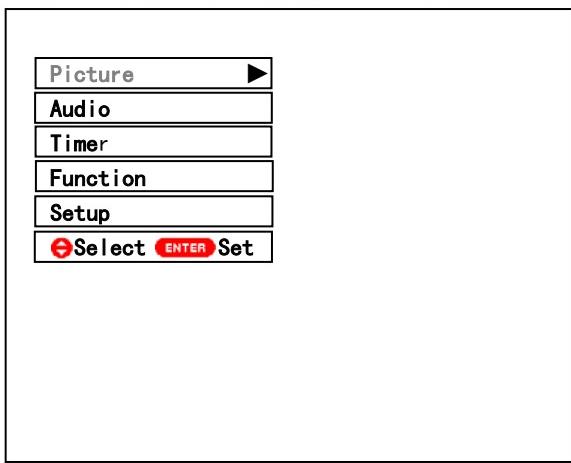
```
Picture          ▶
Audio
Timer
Function
Setup
⊖Select  ENTER Set
```

2 Press the ENTER button to display the **Picture** menu as shown on the right.

This is the first page in the **Picture** menu, providing 4 different picture modes (**Dynamic**, **Natural**, **Theater**, **Favorite**). Press the ◀ ▶ cursor buttons to select. We suggest that you try every item to obtain the desired picture effect.

To set the picture effect you desired, press the ▲ ▼ cursor buttons to select the item to be adjusted, and then press the ◀ ▶ cursor buttons to adjust.

```
Picture          ▼
  Picture Mode  ▶    Favorite
  ◑ Contrast         +60
  ☼ Brightness       0
  ◔ Color            0
  ⛰ Tint             0
  ◫ Sharpness        0
  Color Temp.        Cool
  PAL Comb Filter    On
  Reset           ⬇
  ⊖Select  ◑Set  RETURN Return
```
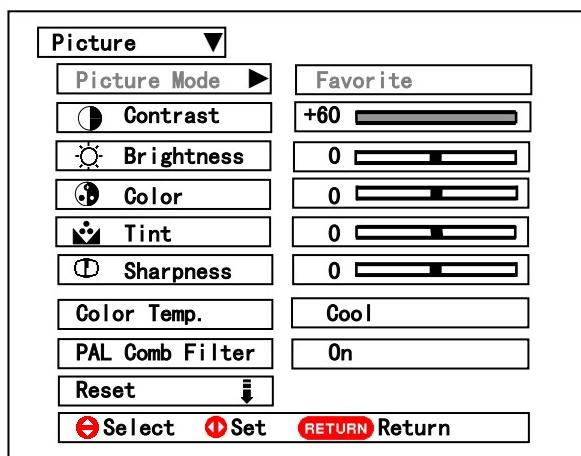
Notes：

（1）Press the PICTURE button on the remote control unit, you can switch among the above four picture modes easily.

（2）Only when receiving NTSC signals or Y, P_B/C_B, P_R/C_R inputs or HDMI input, the **Tint** option can be adjusted.

（3）Only when receiving PAL system, the **PAL Comb Filter** option can be set to **On** or **Off**; when receiving other systems, the comb filter is automatically set.

（4）If the **Reset** option is selected and confirmed by pressing the ENTER button, the current setting on the menu will return to the factory setting.

（5）For **AV1**～**AV5** inputs, different picture modes can be set individually.

ON-SCREEN DISPLAY MENU【PICTURE MENU】

3 Press the ▼ cursor button until the second page in the **Picture** menu appears as shown on the right. These settings allow you to enhance or improve the visual condition of the picture.

```
┌──────────────────────────────────────────────────┐
│  Picture        ▼                                  │
│  ┌──────────────────────┐      ┌──────────────┐    │
│  │ Film Mode       ↕ ▶  │      │      On      │    │
│  ├──────────────────────┤      ├──────────────┤    │
│  │ Noise Reduction      │      │     Low      │    │
│  ├──────────────────────┤      ├──────────────┤    │
│  │ VM                   │      │     Off      │    │
│  ├──────────────────────┤      ├──────────────┤    │
│  │ Dynamic Contrast     │      │      On      │    │
│  ├──────────────────────┤      ├──────────────┤    │
│  │ Black Stretch        │      │     Low      │    │
│  ├──────────────────────┤      ├──────────────┤    │
│  │ CTI                  │      │     Low      │    │
│  ├──────────────────────┤      └──────────────┘    │
│  │ Color Manager        │                          │
│  ├──────────────────────┤                          │
│  │ Reset                │                          │
│  ├──────────────────────────────────────────┐      │
│  │ ⊖Select  ⊕Set  RETURN Return             │      │
│  └──────────────────────────────────────────┘      │
└──────────────────────────────────────────────────┘
```
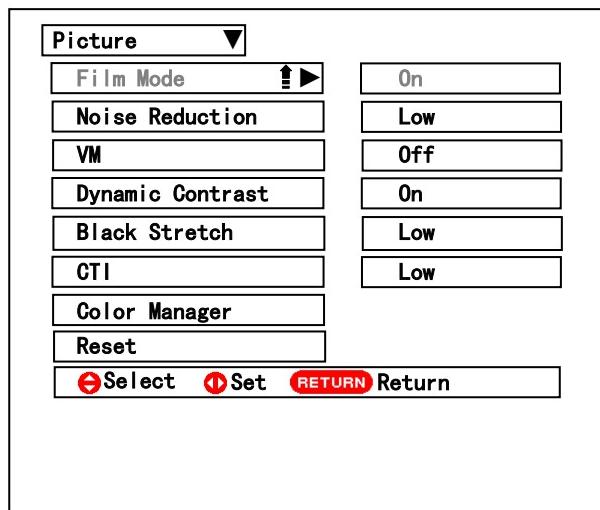
Notes: （1） If **Noise Reduction** is set to **High** or **Low**，the **Sharpness** option cannot be adjusted.

（2） While **Film Mode** is on, your projection TV will activate the circuitry for special feature to improve the video performance when viewing film based sources.

（3） When **HD** or **Progressive** signals are input，**Film Mode** option cannot be adjusted.

4 Repeatedly press the ▼ cursor button as shown on the top right to select the **Color Manager** option, then press the ▶ cursor button to display the menu as shown on the right.

When the **Color Manager** option shown on the right is set to **On**, you can adjust and balance their individual color for your personal preference to obtain the deeper and purer color effect.

If the option of **Reset** was selected and press the ENTER button, the **Color Manager** menu will return to factory default setting.

```
┌────────────────────────────────────────────────┐
│  Color Manager  ▼                                │
│  ┌──────────────────────┐    ┌──────────────┐    │
│  │ Color Manager  ▶     │    │     On       │    │
│  └──────────────────────┘    └──────────────┘    │
│                              ( Phase )  ( Gain )  │
│  ● Magenta                    0 ▭▬      0 ▭▬       │
│  ● Red                        0 ▭▬      0 ▭▬       │
│  ● Yellow                     0 ▭▬      0 ▭▬       │
│  ● Green                      0 ▭▬      0 ▭▬       │
│  ● Cyan                       0 ▭▬      0 ▭▬       │
│  ● Blue                       0 ▭▬      0 ▭▬       │
│  Reset                                            │
│  ⊖Select  ⊕Set  RETURN Return                     │
└────────────────────────────────────────────────┘
```
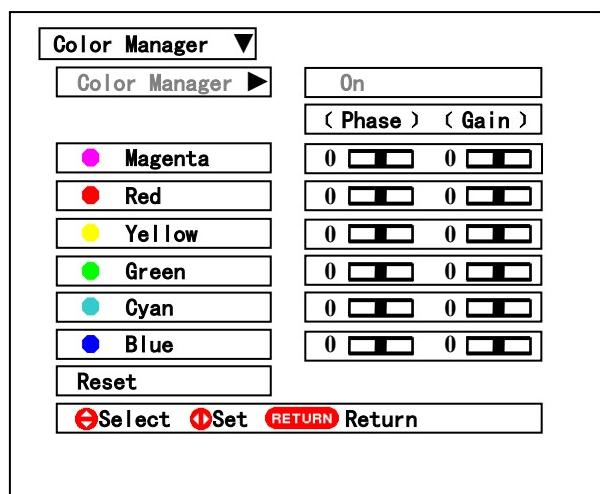
Each color in the menu provides two options (Phase and Gain). Press the ▲ ▼ cursor buttons to select the adjustment item, and then press the ◀ ▶ cursor buttons to adjust.

```
┌────────────────────────────────────────────────┐
│                                                  │
│                                                  │
│                                                  │
│  ● Phase        ▶        0  ▭▭▭                   │
│  ● Gain                 +31 ▭▭▭                   │
│  ⊖Select  ⊕Set  RETURN Return                     │
└────────────────────────────────────────────────┘
```
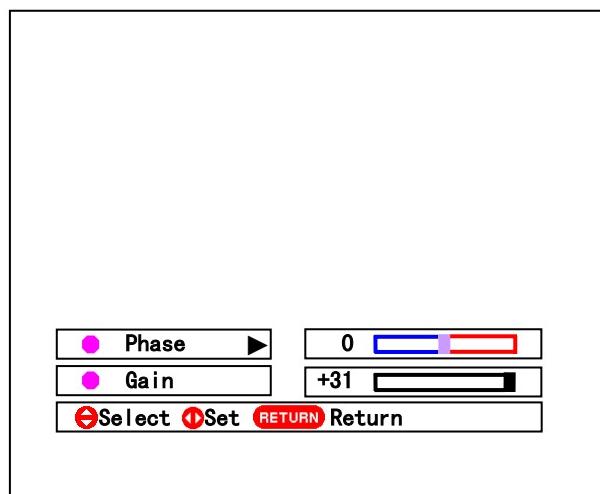
ON-SCREEN DISPLAY MENU【AUDIO MENU】

Audio Menu

Audio menu allows you to adjust various sounds settings such as treble, bass, balance and headphone volume. You can also adjust the settings for surround effect, perfect volume, etc. Please follow the steps below.

1 Press the **MENU** button to display menu.

Press the ▲ ▼ cursor buttons to select the **Audio** option as shown on the right.

```
┌─────────────────────────┐
│ Picture                 │
│ Audio              ▶    │
│ Timer                   │
│ Function                │
│ Setup                   │
│ ⊖Select  ENTER Set      │
└─────────────────────────┘
```
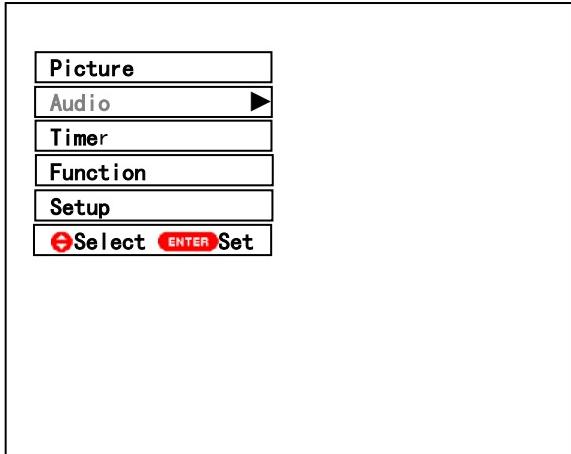
2 Press the **ENTER** button to display the **Audio** menu as shown on the right.

This is the first page in the **Audio** menu, providing 4 different audio modes (**Theater, Music, Narration** and **Favorite**). Press the ◄ ► cursor buttons to select. We suggest that you try every item to obtain the desired sound effect.

To set the sound effect you desired, press the ▲ ▼ cursor buttons to select the item to be adjusted, then press the ◄ ► cursor buttons to adjust.

During the process of adjustment, the indicator will move left or right, allowing you to know the state of adjustment.

```
┌─────────────────────────────────────┐
│ Audio          ▼                     │
│   Audio Mode      ▶     Favorite     │
│  ♪ Treble              +16 ▭▭▭▭▬     │
│  ♩: Bass               0   ▭▬▭▭▭     │
│  ◣◢ Balance            0   ▭▭▬▭▭     │
│  ◯ HP Volume           +20 ▬▬▭▭▭     │
│   Reset            ⬇                 │
│   ⊖Select  ◑Set   RETURN Return      │
└─────────────────────────────────────┘
```
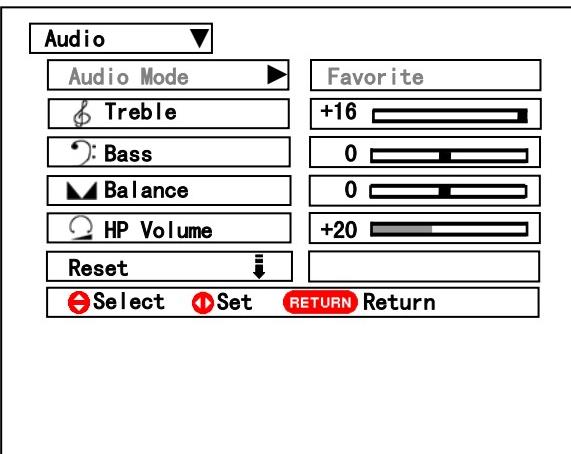
Note:
Press the **AUDIO** button on the remote control unit, you can switch among the above four audio modes easily.

3 Press the ▼ cursor button until the second page in the **Audio** menu appears as shown on the right. These settings allow you to enhance or improve the sound effect.

Note:
SRS⦿ is a trademark of **SRS Labs，Inc.**
SRS technology is incorporated under license from **SRS Labs, Inc.**

BBE :Licensed by **BBE Sound，Inc.** under **USP5510752** and **5736897**. **BBE** and **BBE** symbol are registered trademarks of **BBE Sound, Inc.**

```
┌─────────────────────────────────────┐
│ Audio          ▼                     │
│   SRS          ⬍▶       Low          │
│   BBE                   Low          │
│   Bass Boost            Off          │
│   Perfect Volume        On           │
│   Loudness              Off          │
│   Reset                              │
│   ⊖Select  ◑Set   RETURN Return      │
└─────────────────────────────────────┘
```
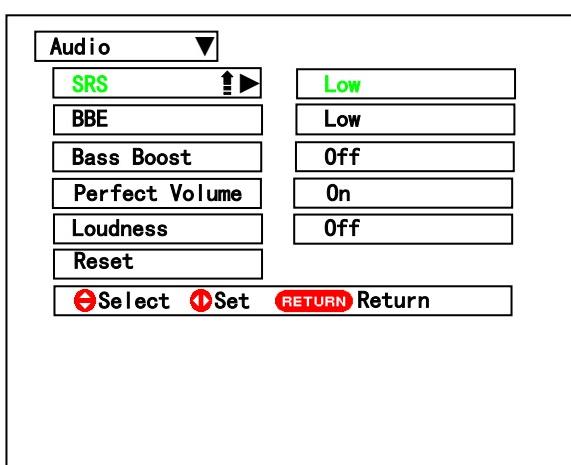
ON-SCREEN DISPLAY MENU【TIMER MENU】

Timer Menu

The **Timer** function for this TV uses a countdown timer system. It features **On Timer**, **Off Timer** and **Auto Off**.

1 Press the **MENU** button to display the menu.
Press the **▲** **▼** cursor buttons to select the **Timer** option as shown on the right.

```
Picture
Audio
Timer          ▶
Function
Setup
🔴Select ᴇɴᴛᴇʀSet
```
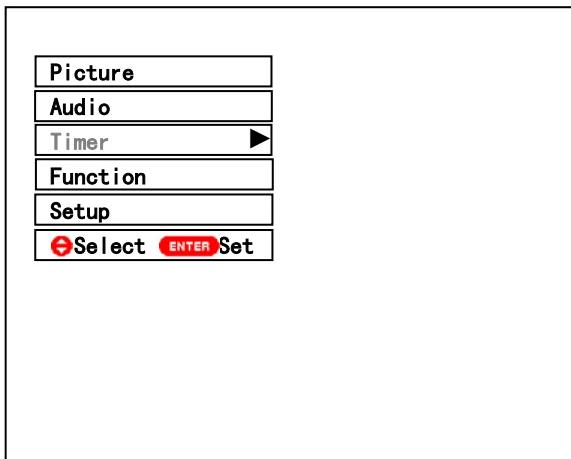
2 Press the **ENTER** button to enter the **Timer** menu as shown on the right.
The adjustment items are shown below:

```
Timer          ▼
On                  -- : --
Off          ▶      01 : 25
Auto Off            On
🔴Select ⓪-⑨Set ʀᴇᴛᴜʀɴReturn
```

Off Timer

Example：To turn off after 1 hour and 25 minutes.
Press the **▲** **▼** cursor buttons to select the **Off** option. Press number buttons to enter the specified amount of time (the maximum time is 23:59), input the hour, then input the minute, i.e.01:25 (shown on the right). Timer starts countdown after quitting the **Timer** menu. After 1 hour and 25 minutes, the TV will go into standby mode.
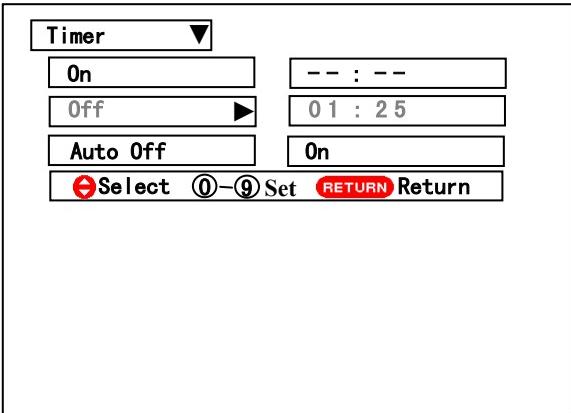
Note: As a precautionary measure, after setting **Off Timer**, if the power is turned off or power supply is cut off accidentally before the set time elapses, the TV will be in standby mode when you restart the TV.

On Timer

The setting of **On Timer** is similar to that of **Off Timer**. After **On Timer** is set, please turn off the TV by pressing the ⏻ button on the remote control unit to start the countdown, the power indicator on the front of the TV will be blinking. This is normal. The power is turned on when the set time has elapsed.

Notes: 1) If turning off the power using the **POWER** button on the front panel, **On Timer** will not work.
2) If the power is turned off by pressing the **POWER** button on the front panel before the set time elapses or the power supply is cut off accidentally, the TV will be in standby mode when you restart the TV.
3) As a precautionary measure, if there is no operation for 2 hours after the power is turned on by the **On Timer** function, the TV will go into standby mode automatically.

Auto Off

If **Auto Off** is set to **On** and there is no more broadcasting transmission (i.e. no signal is detected), the TV will go into standby mode automatically after 60 minutes. If **Auto Off** is set to **Off**, this function will be cancelled.

Notes: 1) **Auto Off** is only valid if no signal transmission is received from the antenna terminals.
2) If Within 60 minutes after no signal is detected, switching TV to any channel with signal will cancel the **Auto Off** function.

ON-SCREEN DISPLAY MENU【FUNCTION MENU】

Function Menu

Function menu allows you to select scan mode, decorative light on the front panel and multi picture mode, etc. Please follow the steps below.

1 Press the MENU button to display the menu.

Press the ▲ ▼ cursor buttons to select the **Function** option as shown on the right.

```
Picture
Audio
Timer
Function          ▶
Setup
 Select  ENTER Set
```
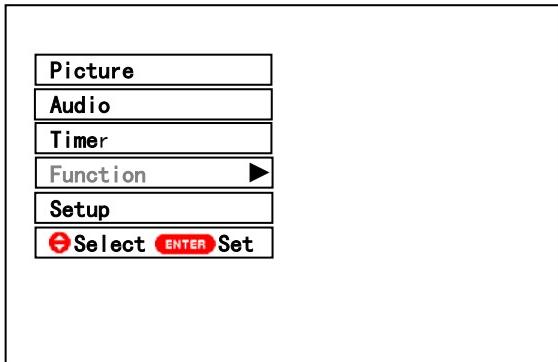
2 Press the ENTER button to enter the **Function** menu.

Press the ▲ ▼ cursor buttons to select the **Scan Mode** option as shown on the right.

```
Function        ▼
   Scan Mode        ▶       Progressive
   Decorative Light          Off
   TV P.Size                 Expanded
   Auto P.Size               On
   Multi Picture
   Photo
   Reset
   Select  Set  RETURN Return
```
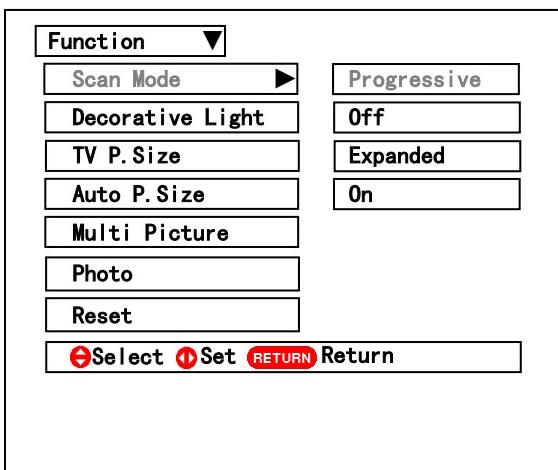
3 Press the ENTER button to enter the **Scan Mode** menu as shown on the right.

You can press the ◀ ▶ cursor buttons to select different scan modes to improve picture effect.

（1）For **PAL** or **SECAM** system，you can select scan mode from **100Hz,Virtual HD** or **Progressive**.

（2）For **NTSC** system, you can select scan mode from **Virtual HD** or **Progressive**.

（3）When the input signal format is **480p** signal, the scan mode setting will be fixed at **Progressive**.

（4）When the input signal format is **576p** signal, you can select scan mode from **100Hz** or **Progressive**. The **100Hz** mode can eliminate flicker.

```
   Scan Mode        ▶       Progressive
   Set   RETURN Return
```

（5）When the input signal format is **1080i/60** or **720p/60** HD signal, the scan mode setting will be fixed at **HD**.

（6）When the input signal format is **1080i/50** HD signal, you can select scan mode between **100Hz** or **HD.** The **100Hz** mode can eliminate flicker.
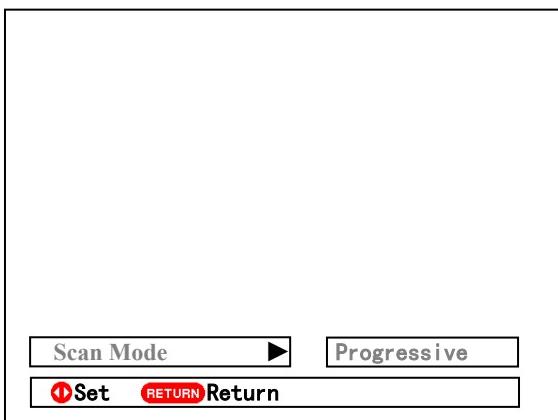
4 If the **Decorative Light** option on the **Function** menu is selected, you can turn the blue lighting on the control panel **On** or **Off**. When the TV is in standby or the power is off, the lighting on the front panel will be off.

ON-SCREEN DISPLAY MENU【FUNCTION MENU】

5 Follow the steps on page 20 to enter the **Function** menu and select the **TV P.Size** option as shown on the right. Press the ◄ ► cursor buttons to set the **TV P.Size** option to **Expanded**, **4:3** or **16:9** mode.
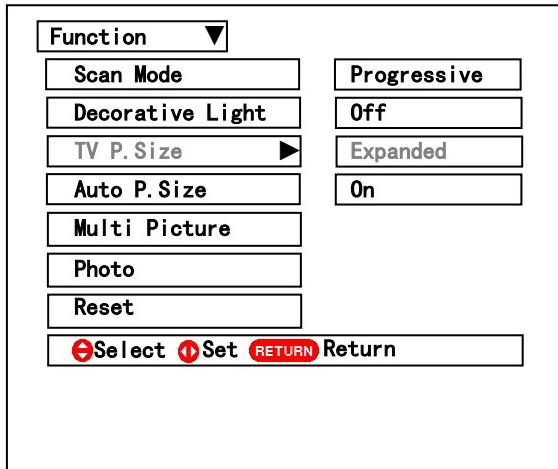
Note: Please refer to page 54-55 for information on this function.

```
Function        ▼
  Scan Mode              Progressive
  Decorative Light       Off
  TV P.Size        ►     Expanded
  Auto P.Size            On
  Multi Picture
  Photo
  Reset
  ⊖Select ⬙Set RETURN Return
```

6 Follow the steps on page 20 to enter the **Function** menu and select the **Auto P.Size** option as shown on the right. Press the ◄ ► cursor buttons to set the **Auto P.Size** option to **On** or **Off**.
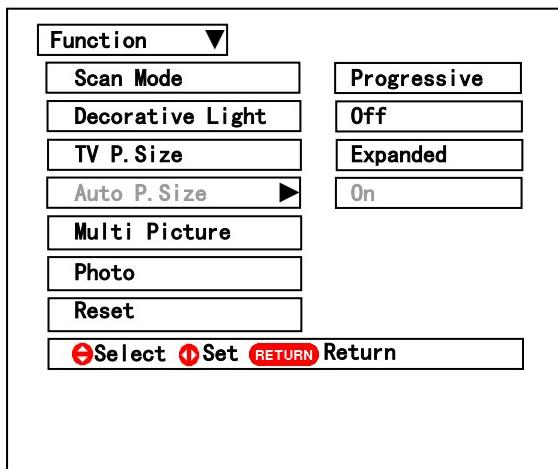
Note: Please refer to page 56 for information on this function.

```
Function        ▼
  Scan Mode              Progressive
  Decorative Light       Off
  TV P.Size              Expanded
  Auto P.Size      ►     On
  Multi Picture
  Photo
  Reset
  ⊖Select ⬙Set RETURN Return
```

7 Follow the steps on page 20 to enter the **Function** menu and select the **Multi Picture** option, then press the ► cursor button to enter **Multi Picture** menu as shown on the right.
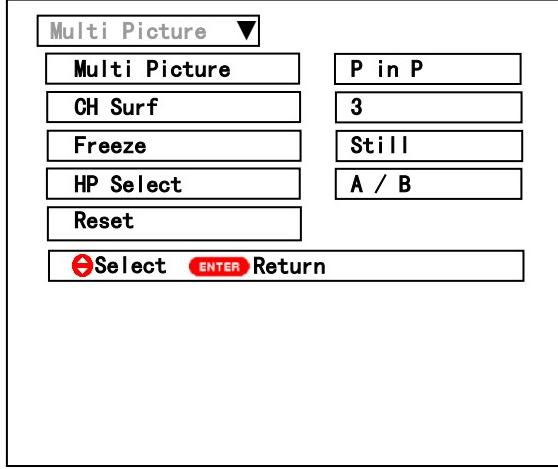
Note: Please refer to page 33-37 for information on this function.

```
Multi Picture   ▼
  Multi Picture          P in P
  CH Surf                3
  Freeze                 Still
  HP Select              A / B
  Reset
  ⊖Select  ENTER Return
```

ON-SCREEN DISPLAY MENU【FUNCTION MENU】

8 Follow the steps on page 20 to enter the **Function** menu and select the **Photo** option, then press the ▶ cursor button to enter **Photo** menu as shown on the right.

```
┌─────────────────────────────────────────────┐
│  Photo              ▼                         │
│  ┌──────────────────┐    ┌──────────────┐     │
│  │ Background        │    │ Off          │     │
│  └──────────────────┘    └──────────────┘     │
│  ┌──────────────────┐    ┌──────────────┐     │
│  │ Slide Mode        │    │ 1            │     │
│  └──────────────────┘    └──────────────┘     │
│  ┌──────────────────┐    ┌──────────────┐     │
│  │ Slide Interval    │    │ 5sec         │     │
│  └──────────────────┘    └──────────────┘     │
│  ┌──────────────────┐    ┌──────────────┐     │
│  │ Slide Effect      │    │ Off          │     │
│  └──────────────────┘    └──────────────┘     │
│  ┌──────────────────┐    ┌──────────────┐     │
│  │ Slide Music       │    │ Off          │     │
│  └──────────────────┘    └──────────────┘     │
│  ┌──────────────────┐                         │
│  │ Reset             │                         │
│  └──────────────────┘                         │
│  ┌──────────────────────────────────────┐     │
│  │ ⊖Select   ⏎ENTER Return              │     │
│  └──────────────────────────────────────┘     │
└─────────────────────────────────────────────┘
```

Press the ▲ ▼ cursor buttons to select the **Background** option, then press the ◀ ▶ cursor buttons to set the **Background** option to **Off**, **1** or **2** to choose the background in photo display mode.

Press the ▲ ▼ cursor buttons to select the **Slide Mode** option and press the ◀ ▶ cursor buttons to set the **Slide Mode** option to **1** or **2**. If the **Slide Mode** option is set **1**, press the SLIDE SHOW button to scroll all the photos starting from the first one in photo display mode. If the **Slide Mode** option is set **2**, press the SLIDE SHOW button to scroll from the current photo in photo display mode.

Press the ▲ ▼ cursor buttons to select the **Slide Interval** option and press the ◀ ▶ cursor buttons to set the **Slide Interval** option to **5sec**, **10sec** or **30sec**. (In photo display mode, press the SLIDE SHOW button to display slide show of the photos at fixed interval. For example, when **Slide Interval** is set **5sec**, the interval between each photo displayed during the slide show will be 5 seconds.)
Note: According to the nature of the photo, the actual intervals may be longer than the fixed interval.

Press the ▲ ▼ cursor buttons to select the **Slide Effect** option and press the ◀ ▶ cursor buttons to select **Off**, **1** or **2**. (The **Slide Effect** option is to set the transitional effect between each photo displayed during the slide show.)

Press the ▲ ▼ cursor buttons to select the **Slide Music** option and press the ◀ ▶ cursor buttons to select **Off**, **1** or **2**. (The **Slide Music** option is to set the playing music during the slide show.)
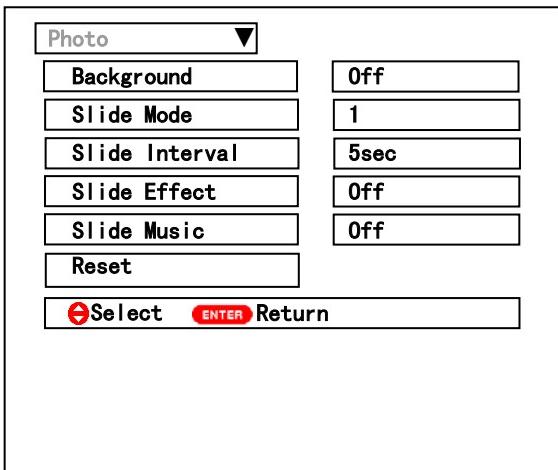
Note: Please refer to page 38-41 for more information on this function.

ON-SCREEN DISPLAY MENU【SETUP MENU】

【**Preset: Tuning**】You can perform search, skip, color system, sound system, program name,etc. on the **Tuning** menu. When the **Easy Preset** tuning is not desirable, you can adopt the following method to select programs.

1 Press the MENU button to display menu.
Press the ▲ ▼ cursor buttons to select the **Setup** option as shown on the right.

```
┌──────────────────────────┐
│ Picture                  │
│ Audio                    │
│ Timer                    │
│ Function                 │
│ Setup              ▶     │
│  ⊖Select ⬤ENTER Set      │
│                          │
└──────────────────────────┘
```
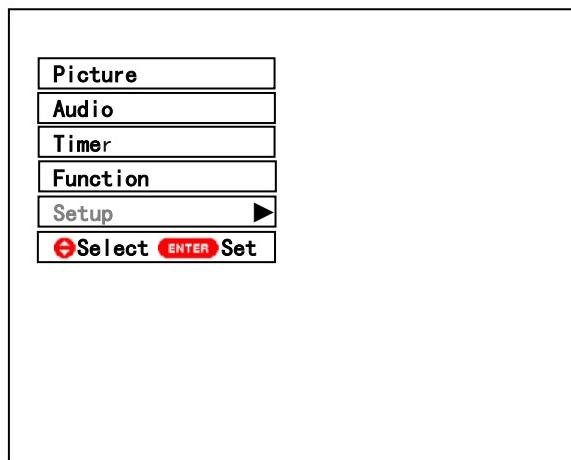
2 Press the ENTER button to enter the **Setup** menu.
Press the ▼ cursor button to select the **Preset** option as shown on the right.

```
┌────────────────────────────────────┐
│ Setup            ▼                  │
│  Preset            ▶                │
│  Easy Preset                        │
│  Auto Link                          │
│  AV NET                             │
│  Speaker          │ On           │  │
│  Audio Out        │ Fixed        │  │
│  Language         │ 中文 ENGLISH  │  │
│  Text Language    │ EAST EUROPE  │  │
│   ⊖Select ⬤ENTER Set ⬤RETURN Return │
└────────────────────────────────────┘
```
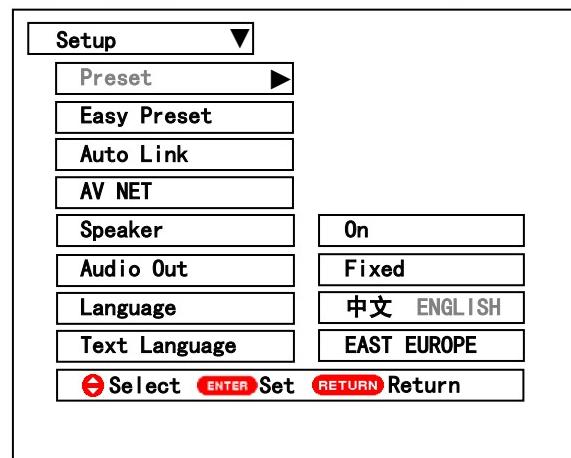
3 Press the ENTER button to enter the **Preset** menu.
Press the ▼ cursor buttons to select the **Tuning** option as shown on the right.

```
┌────────────────────────────────────┐
│ Preset           ▼                  │
│  Tuning            ▶                │
│  Fine Tuning                        │
│  Prog. Exchange                     │
│  Antenna Att.     │ Off          │  │
│  Auto Mute        │ Off          │  │
│   ⊖Select ⬤ENTER Set ⬤RETURN Return │
└────────────────────────────────────┘
```
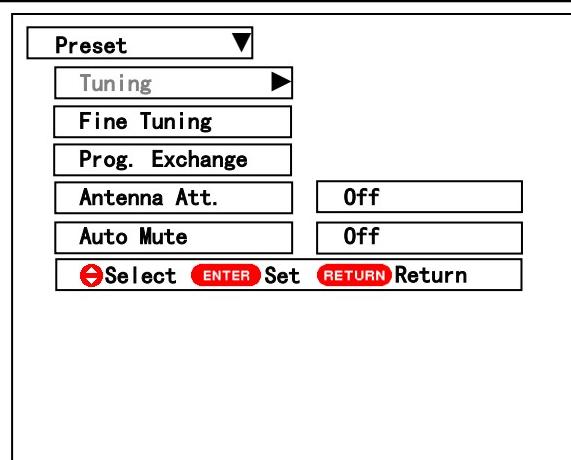
ON-SCREEN DISPLAY MENU【SETUP MENU】

4 Press the ENTER button to enter the **Tuning** menu as shown on the right.

Press the ▲ ▼ cursor buttons to select **Tuning Mode**. Select the channel receiving mode in your region using the ◄ ► cursor buttons. For example, in Singapore, please select **CCIR** on the menu.

Note:
   If without **CCIR** and **China**, you can select **Freq.** to tune.

```
┌─────────────────────────────────────────────┐
│  Tuning              ▼                        │
│  ┌──────────────────────┐   ┌──────────────┐ │
│  │ Tuning Mode        ►│   │ CCIR         │ │
│  │ Program Number      │   │ 0 0 1        │ │
│  │ Search              │   │ 4 9 5 MHz    │ │
│  │ Skip                │   │ Off          │ │
│  │ Sound System        │   │ Auto         │ │
│  │ Color System        │   │ Auto         │ │
│  │ Program Name        │   │ – – – – –    │ │
│  │ TV NR               │   │ Off          │ │
│  │ All Program         │                    │
│  └──────────────────────┘                    │
│  ⊖Select ↕Set  RETURN Return                 │
└─────────────────────────────────────────────┘
```

5 Press the ▲ ▼ cursor buttons to select the **Program Number** option as shown on the right.

Choose a particular program number by pressing the ◄ ► cursor buttons or directly enter the program number buttons, for example,001,002······199,etc.Then press the ▼ cursor button to select the **Search** option. Press the ► or ◄ cursor button, the TV will begin searching automatically forward (high frequency) or backward (low frequency) until adjacent broadcast is found. You can continue to press the ◄ or ► cursor button to search the channel until the desired channel is available.

In this way, you can manually select the desired program easily. Also, you can receive programs from RF output terminal of some equipment.

In addition, you can receive AV program using a particular **Program Number**. Select the **Search** option and press the TV/VIDEO button on the remote control unit to select AV1, AV2, etc. If you do not want to preset AV program, please press the ENTER button on the remote control unit to quit the AV program setting.

```
┌─────────────────────────────────────────────┐
│  Tuning              ▼                        │
│  ┌──────────────────────┐   ┌──────────────┐ │
│  │ Tuning Mode         │   │ CCIR         │ │
│  │ Program Number    ► │   │ 0 0 1        │ │
│  │ Search              │   │ 4 9 5 MHz    │ │
│  │ Skip                │   │ Off          │ │
│  │ Sound System        │   │ Auto         │ │
│  │ Color System        │   │ Auto         │ │
│  │ Program Name        │   │ – – – – –    │ │
│  │ TV NR               │   │ Off          │ │
│  │ All Program         │                    │
│  └──────────────────────┘                    │
│  ⊖Select ↕Set  RETURN Return                 │
└─────────────────────────────────────────────┘
```

6 Select **Skip** using the ▲ ▼ cursor buttons as shown on the right. The **Skip** option in the menu allows you to skip those programs you do not like, for example, some repeated programs or programs with weak signal, etc. When **Skip** option is set to **On** using the ◄ ► cursor buttons, it will skip these programs automatically if you are to select the channels by the **Program up/down** buttons.

Skipped program numbers can still be selected by entering the respective number buttons.

You can access the menu to reset the **Skip** option.

```
┌─────────────────────────────────────────────┐
│  Tuning              ▼                        │
│  ┌──────────────────────┐   ┌──────────────┐ │
│  │ Tuning Mode         │   │ CCIR         │ │
│  │ Program Number      │   │ 0 0 1        │ │
│  │ Search              │   │ 4 9 5 MHz    │ │
│  │ Skip              ► │   │ Off          │ │
│  │ Sound System        │   │ Auto         │ │
│  │ Color System        │   │ Auto         │ │
│  │ Program Name        │   │ – – – – –    │ │
│  │ TV NR               │   │ Off          │ │
│  │ All Program         │                    │
│  └──────────────────────┘                    │
│  ⊖Select ↕Set  RETURN Return                 │
└─────────────────────────────────────────────┘
```

ON-SCREEN DISPLAY MENU 【SETUP MENU】

7 The **Sound System** option in the **Tuning** menu allows you to select between various sound systems i.e. **Auto**, **4.5**, **5.5**, **6.0** or **6.5** (**Note:** Here the unit **MHz** is omitted.). Press the ▲ ▼ cursor buttons to select the **Sound System** option，then press the ◄ ► cursor buttons to select the desired sound systems as shown on the right.

Auto is recommended, as this will automatically determine what system is being broadcast.

Note: This option is valid only for RF signal from antenna.

Tuning ▼	
Tuning Mode	CCIR
Program Number	0 0 1
Search	4 9 5 MHz
Skip	Off
Sound System ►	Auto
Color System	Auto
Program Name	– – – –
TV NR	Off
All Program	
⊖Select ⊕Set RETURN Return	

8 The **Color System** option in the **Tuning** menu allows you to select different color systems i.e. **Auto**, **PAL**, **SECAM, NTSC4.43** or **NTSC3.58**.

Press the ▲ ▼ cursor buttons to select the **Color System** option, then press the ◄ ► cursor buttons to select the desired color systems as shown on the right.

Auto is recommended, as this will automatically determine what system is being broadcast. However, some weak broadcast signals might cause incorrect judgment by the TV and it may become necessary to allocate a particular system to that program number.

Tuning ▼	
Tuning Mode	CCIR
Program Number	0 0 1
Search	4 9 5 MHz
Skip	Off
Sound System	Auto
Color System ►	Auto
Program Name	– – – –
TV NR	Off
All Program	
⊖Select ⊕Set RETURN Return	

Note: Please set **Color System** to **Auto** when receiving signal without color burst.

9 **Program Name** in the **Tuning** menu allows you to assign a name for each channel. The detail steps are shown below:

Press the ▲ ▼ cursor buttons to select the **Program Name** option, then press the ► cursor button to select the letter to be changed from the left to right. When the letter is selected, press the ▲ ▼ cursor buttons to select the desired letter.

When you select a channel that has been named, the channel No., name and other information will appear on the top right corner of the screen. Also, you can press the RECALL button to display the same information.

Tuning ▼	
Tuning Mode	CCIR
Program Number	0 0 1
Search	4 9 5 MHz
Skip	Off
Sound System	Auto
Color System	Auto
Program Name ►	– – – –
TV NR	Off
All Program	
⊖Select ⊕Set RETURN Return	

Notes：
(1) The letters above include 39 letters such as *, 一, SPACE, 0-9, A-Z, etc.
(2) When [– – – –] appears in the **Program Name**, this implies that the channel is not named.
(3) Try to avoid using all spaces to name the program.

ON-SCREEN DISPLAY MENU【SETUP MENU】

10 If the picture is noisy due to weak RF signals from some channels, you can reduce noise by using **TV NR** function.

Press the ▲ ▼ cursor buttons to select the **TV NR** option and then press the ◄ ► cursor buttons to select **Off**, **Low** and **High** to turn off noise reduction function, activate low noise reduction and high noise reduction respectively. Different channels can be set independently.

Note: This option is valid only for RF signal from antenna.

```
Tuning                    ▼
  Tuning Mode              CCIR
  Program Number           0 0 1
  Search                   4 9 5 MHz
  Skip                     Off
  Sound System             Auto
  Color System             Auto
  Program Name             - - - - -
  TV NR            ►       Off
  All Program
  ⊖Select ⓓSet RETURN Return
```
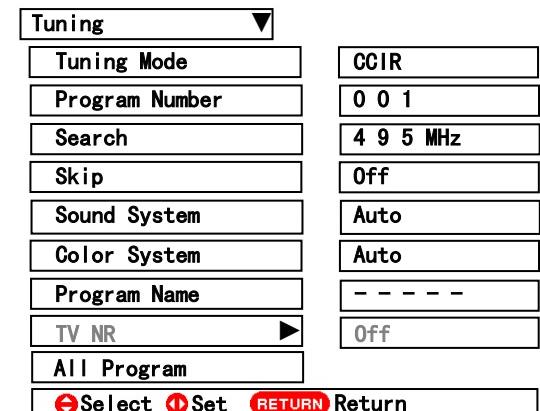
11 **All Program** in **Tuning** menu can automatically search all available frequencies and store all stations available to the program numbers starting from the current program No.

Press the ▲ ▼ cursor buttons to select the **Program Number** option on the menu, press the ◄ ► cursor buttons or number buttons to select program No.

Press the ▲ ▼ cursor buttons to select the **All Program** option as shown on the right. Then press the ENTER button to begin the auto tune procedure. The word **Searching** will appear at the bottom of the menu, and the TV will search for all frequencies and store all tuned frequencies to the program numbers starting from the **Program Number** selected.

In the process of searching, press the ENTER button to quit.

After complete the searching, the TV will quit the menu automatically.

```
Tuning                    ▼
  Tuning Mode              CCIR
  Program Number           0 0 1
  Search                   4 9 5 MHz
  Skip                     Off
  Sound System             Auto
  Color System             Auto
  Program Name             - - - - -
  TV NR                    Off
  All Program      ►
  ⊖Select ⓓSet RETURN Return
```
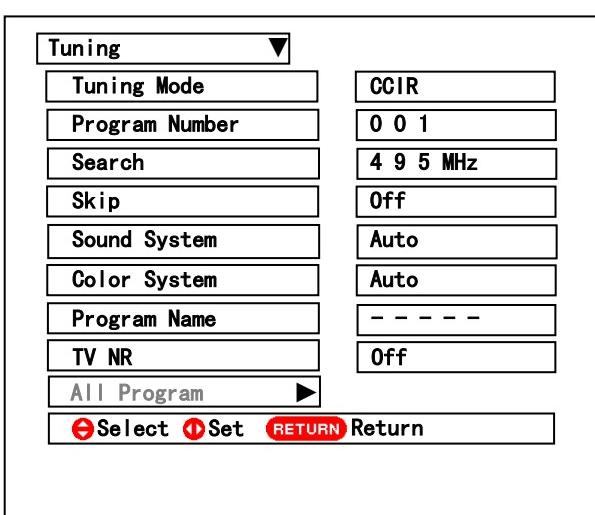
AV PRESETTING

Press the TV/VIDEO button to switch the picture to the AV mode.

Enter the **Preset** menu to display the menu as shown on the right. Press the ▲ ▼ cursor buttons to select the **AV Mode** option and the ◄ ► cursor buttons or the TV/VIDEO button to select **AV1**, **AV2**, **AV3**, **AV4** or **AV5**.

Press the ▲ ▼ cursor buttons to select the **Color System** option, then press ◄ ► cursor buttons to select **Auto**, **PAL**, **SECAM**, **NTSC4.43** or **NTSC3.58.**

If the picture in AV mode is abnormal resulted from incorrect color system, you can use the **Color System** option to select the correct system.

When receiving component signal (Y, P_B/C_B, P_R/C_R) from **INPUT1** (or HDMI input) or **INPUT2** terminal, though the **Color System** option can be set, it has no effect on the picture. This is normal.

```
Preset              ▼
  AV Mode       ►     AV1
  Color System        Auto
  ⊖Select ⓓSet RETURN Return
```
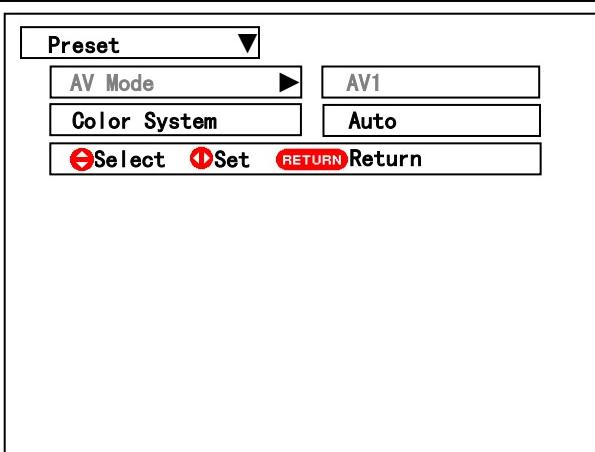
ON-SCREEN DISPLAY MENU【SETUP MENU】

【**Preset：Fine Tuning**】It is unnecessary to fine tune in normal receiving condition. However, fine tuning is required in some areas where the broadcasting signals are weak. Please follow the steps as shown below.

1   Follow the steps on page 23 to enter the **Preset** menu as shown on the right.

```
┌──────────────────────────────────────────┐
│  Preset          ▼                         │
│    ┌─────────────────┐                     │
│    │ Tuning          │                     │
│    ├─────────────────┤                     │
│    │ Fine Tuning     │                     │
│    ├─────────────────┤                     │
│    │ Prog. Exchange  │                     │
│    ├─────────────────┤  ┌──────────┐       │
│    │ Antenna Att.    │  │ Off      │       │
│    ├─────────────────┤  ├──────────┤       │
│    │ Auto Mute       │  │ Off      │       │
│    ├─────────────────┴──┴──────────┤       │
│    │ ⬌Select  ⬤ENTER Return       │       │
│    └─────────────────────────────────┘     │
│                                            │
└──────────────────────────────────────────┘
```
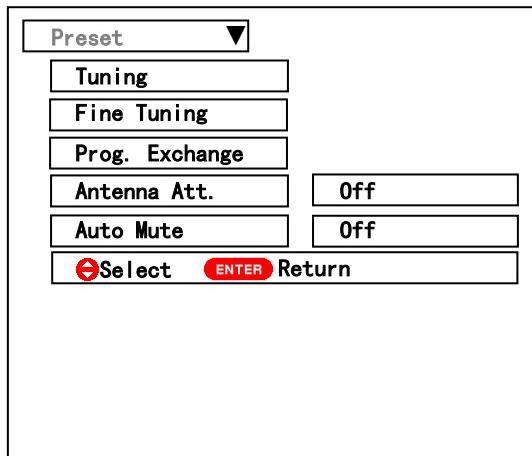
2   Press the ▲ ▼ cursor buttons to select the **Fine Tuning** option as shown on the right.

```
┌──────────────────────────────────────────┐
│  Preset          ▼                         │
│    ┌─────────────────┐                     │
│    │ Tuning          │                     │
│    ├─────────────────┤                     │
│    │ Fine Tuning   ▶ │                     │
│    ├─────────────────┤                     │
│    │ Prog. Exchange  │                     │
│    ├─────────────────┤  ┌──────────┐       │
│    │ Antenna Att.    │  │ Off      │       │
│    ├─────────────────┤  ├──────────┤       │
│    │ Auto Mute       │  │ Off      │       │
│    ├─────────────────┴──┴──────────┤       │
│    │ ⬌Select ⬤ENTER Set ⬤RETURN Return │   │
│    └─────────────────────────────────┘     │
│                                            │
└──────────────────────────────────────────┘
```
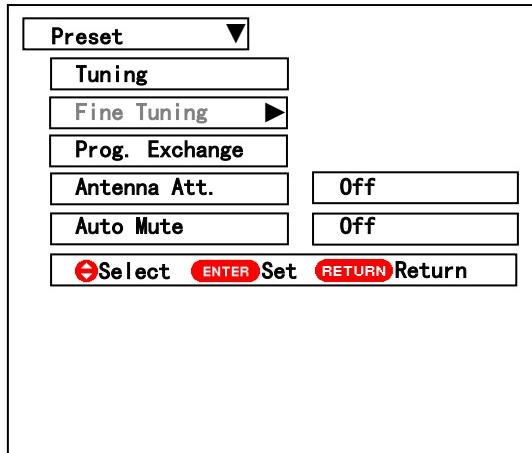
3   The Fine tuning adjustment bar is shown on the screen as shown on the right by pressing the **ENTER** button. Then press the ◀ ▶ cursor buttons to fine tune for desired picture condition.

```
┌──────────────────────────────────────────┐
│                                            │
│                                            │
│   ┌─────────────────┐   ┌──────────────┐  │
│   │ Fine Tuning   ▶ │   │ ▢▢▢█▢▢▢       │  │
│   ├─────────────────┴───┴──────────────┤  │
│   │ ⬤Set  ⬤RETURN Return              │  │
│   └─────────────────────────────────────┘ │
└──────────────────────────────────────────┘
```
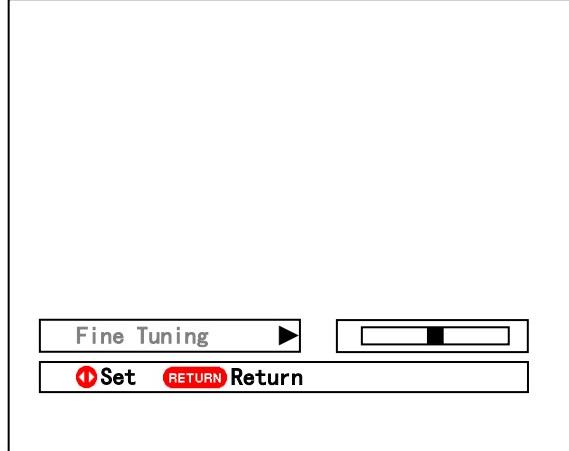
ON-SCREEN DISPLAY MENU【SETUP MENU】

【**Preset: Prog.Exchange**】The menu allows you to set the program to your desired channel position. Please follow the steps below.

1 Follow the steps on page 23 to enter the **Preset** menu, then select the **Prog. Exchange** option as shown on the right.

```
┌──────────────────────────────────────────┐
│  Preset          ▼                         │
│   ┌────────────────────┐                   │
│   │ Tuning             │                   │
│   ├────────────────────┤                   │
│   │ Fine Tuning        │                   │
│   ├────────────────────┤                   │
│   │ Prog. Exchange  ▶  │                   │
│   ├────────────────┐ ┌──────────┐          │
│   │ Antenna Att.   │ │ Off      │          │
│   ├────────────────┤ ├──────────┤          │
│   │ Auto Mute      │ │ Off      │          │
│   └─────────────┬──┴─┴──────────┴────────┐ │
│    ⊜Select  ENTER Set  RETURN Return      │ │
│   └──────────────────────────────────────┘ │
└──────────────────────────────────────────┘
```
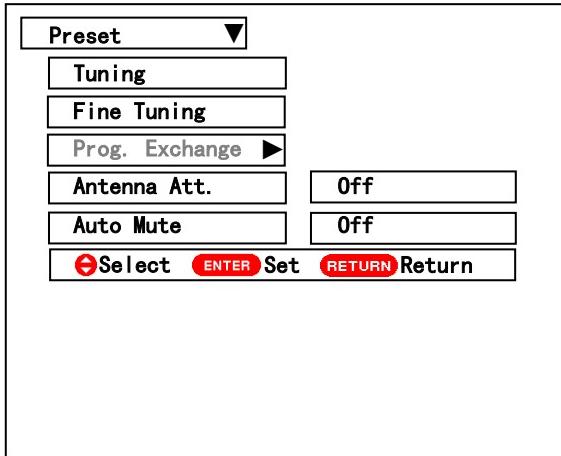
2 Press the **ENTER** button to display the **Prog. Exchange** menu as shown on the right.
Select the **Prog.No.** option to be exchanged (left side of arrow shows green), press the ▲ ▼ cursor buttons to select program No. **001** as shown on the right.

```
┌──────────────────────────────────────────┐
│  ┌─────────────────┐                       │
│  │ Prog. Exchange ▼│                       │
│  └─────────────────┘                       │
│    (Before)             (After)            │
│   Prog.No. Ch./Freq.   Prog.No. Ch./Freq.  │
│   0 0 1 : 2 0 8 MHz ←→ 1 9 9 : 1 9 2 MHz   │
│                                            │
│    ⊜Select  ENTER Confirm  RETURN Return   │
└──────────────────────────────────────────┘
```
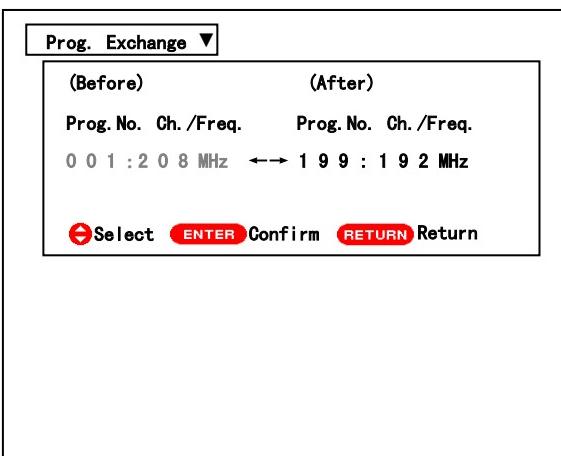
3 Press the **ENTER** button to select the other **Prog.No.** (right side of arrow shows green) and press the ▲ ▼ cursor buttons to select the program No. desired to be exchanged (No.**199**) as shown on the right. Then press the **ENTER** button to carry out the exchange.

```
┌──────────────────────────────────────────┐
│  ┌─────────────────┐                       │
│  │ Prog. Exchange ▼│                       │
│  └─────────────────┘                       │
│    (Before)             (After)            │
│   Prog.No. Ch./Freq.   Prog.No. Ch./Freq.  │
│   0 0 1 : 2 0 8 MHz ←→ 1 9 9 : 1 9 2 MHz   │
│                                            │
│    ⊜Select  ENTER Exchange  RETURN Return  │
└──────────────────────────────────────────┘
```
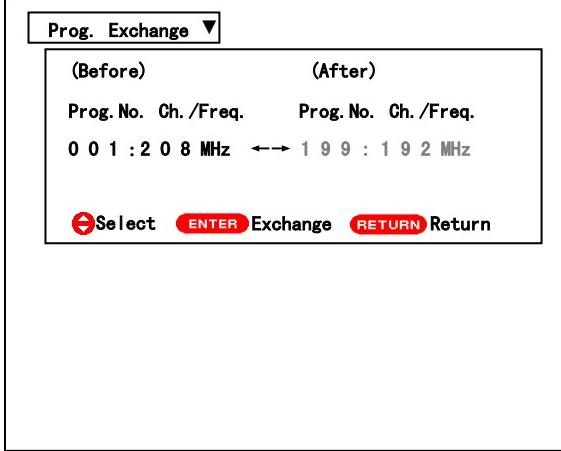
ON-SCREEN DISPLAY MENU【SETUP MENU】

【**Preset：Antenna Att.**】In some cases, the quality of picture may be impaired due to strong RF signal from the antenna terminal. You can set the antenna attenuation to prevent such problem. Please follow the steps below.

Follow the steps on page 23 to enter the **Preset** menu, then select the **Antenna Att.** option as shown on the right.

Press the ◀ ▶ cursor buttons to set the **Antenna Att.** option **On** or **Off** to turn on or off the **Antenna Att.** function.

```
Preset              ▼
    Tuning
    Fine Tuning
    Prog. Exchange
    Antenna Att.    ▶    Off
    Auto Mute            Off
    ⊖Select  ⓘSet  RETURN Return
```
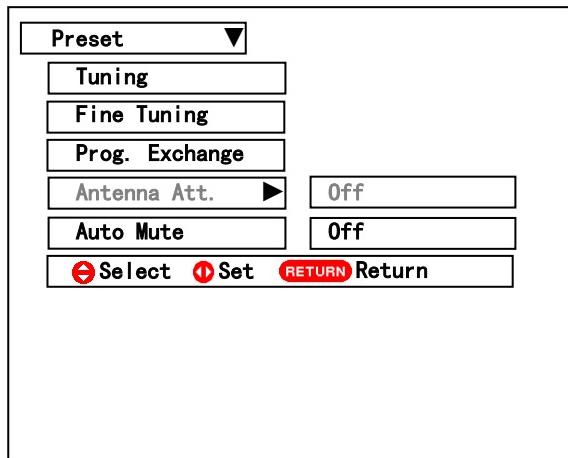
【**Preset：Auto Mute**】If **Auto Mute** is **On**, the noise from TV will be controlled when there is no signal transmission from the antenna terminal.

Follow the steps on page 23 to enter the **Preset** menu, then select the **Auto Mute** option as shown on the right.

Press the ◀ ▶ cursor buttons to set the **Auto Mute** option **On** or **Off** to turn on or off the **Auto Mute** function.

```
Preset              ▼
    Tuning
    Fine Tuning
    Prog. Exchange
    Antenna Att.         Off
    Auto Mute       ▶    Off
    ⊖Select  ⓘSet  RETURN Return
```
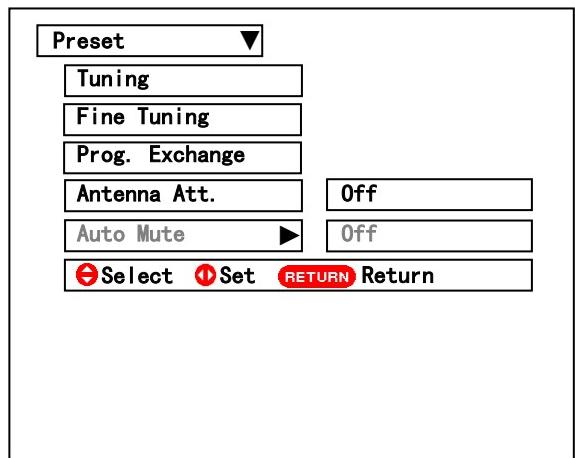
【**Easy Preset**】Refer to page 15.

ON-SCREEN DISPLAY MENU【SETUP MENU】

【Auto Link】

Use this function to automatically switch on the TV and switch it to **AV1** or **AV5** mode when it detects a video signal from **INPUT1** (or Y signal or HDMI signal) or **INPUT5** (or S-VIDEO signal) terminal of the TV. It provides you ease when using with your external equipment.

Connect external equipment to **INPUT1** or **INPUT5** terminal of the TV. Refer to CONNECTION WITH OTHER EQUIPMENT on page 60, 62 and 63 for more information.

Follow the steps on page 23 to enter the **Setup** menu and select the **Auto Link** option. Enter the **Auto Link** menu as shown below. Press the ▲ ▼ cursor buttons to select **AV1** or **AV5.** Then press the ◄ ► cursor buttons to set **AV1** or **AV5** to **On, Auto Link** function for the respective inputs will be activated.

(1)If you switch on the power of the external equipment connected to **INPUT1** or **INPUT5** terminal of the TV when its power is on, and there is an output signal from these external equipment, **Auto Link** function will automatically switch the TV from the TV channel or any other AV modes to **AV1** or **AV5** mode accordingly.

(2)If you switch on the power of the external equipment connected to **INPUT1** or **INPUT5** terminal of the TV when it is at standby mode, and there is an output signal from these external equipment. **Auto Link** function will automatically switch on the TV and switch to **AV1** or **AV5** automatically. The set will turn to standby mode automatically from the time when there is no operation on the set for a long time.

```
┌──────────────────────────────────┐
│ Auto Link          ▼             │
│   ┌──────────────┐  ┌──────────┐ │
│   │ AV1        ► │  │    On    │ │
│   ├──────────────┤  ├──────────┤ │
│   │ AV5          │  │    On    │ │
│   └──────────────┘  └──────────┘ │
│   ⊖ Select ◑ Set  [RETURN] Return│
└──────────────────────────────────┘
```
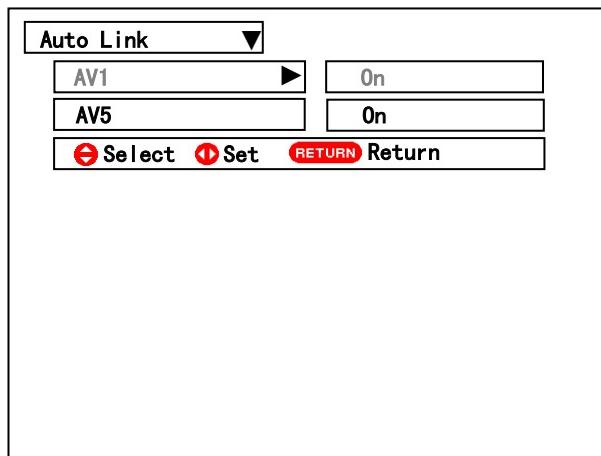
Note:

When the HDMI input has been connected and the TV is in standby. If you switch on the power of the HDMI equipment, the TV keep in standby.

Remarks：

（1） If the performance of your external equipment connected to **AV1** or **AV5** on the TV is not reliable, it is recommended to turn off the **Auto Link** function to avoid the misoperation.

（2） If you use your external equipment or the video cassette recorder to perform recording after they are set to **On Timer**, do not activate **Auto Link** function to avoid the misoperation.

【AV NET】 Refer to page 42-52.

【Speaker】

Follow the steps on page 23 to enter the **Setup** menu, then select the **Speaker** option as shown on the right.

Press the ◄ ► cursor buttons to set the **Speaker** option **On** or **Off** to turn on or off the speakers of the TV.
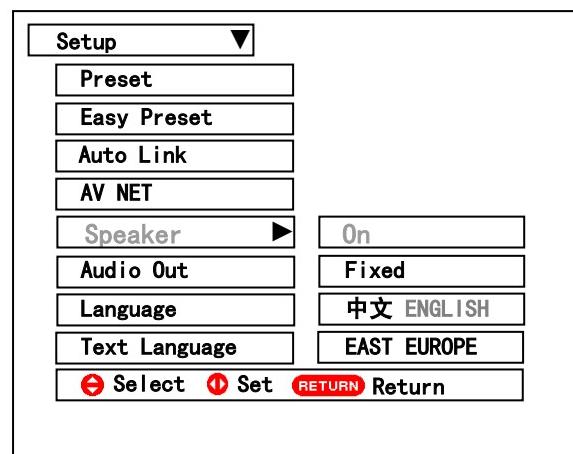
Note: When the external stereo system is connected to the FIXED/VARIABLE AUDIO output terminals of the TV, you can set the **Speaker** option to **Off** to turn off the speakers of the TV.

```
┌──────────────────────────────────┐
│ Setup              ▼             │
│   ┌──────────────┐               │
│   │   Preset     │               │
│   ├──────────────┤               │
│   │ Easy Preset  │               │
│   ├──────────────┤               │
│   │ Auto Link    │               │
│   ├──────────────┤               │
│   │ AV NET       │               │
│   ├──────────────┤  ┌──────────┐ │
│   │ Speaker    ► │  │    On    │ │
│   ├──────────────┤  ├──────────┤ │
│   │ Audio Out    │  │  Fixed   │ │
│   ├──────────────┤  ├──────────┤ │
│   │ Language     │  │中文 ENGLISH│ │
│   ├──────────────┤  ├──────────┤ │
│   │Text Language │  │EAST EUROPE│ │
│   └──────────────┘  └──────────┘ │
│   ⊖ Select ◑ Set  [RETURN] Return│
└──────────────────────────────────┘
```

ON-SCREEN DIPLAY MENU【SETUP MENU】

【Audio Out】

Follow the steps on page 23 to enter the **Setup** menu, then select the **Audio Out** option as shown on the right.

Press the ◀ ▶ cursor buttons to set the **Audio Out** option **Fixed** or **Variable**.

The setting of the **Audio Out** option can change the output mode of the FIXED/VARIABLE AUDIO output terminals. It provides you with two modes (**Fixed** or **Variable**) for selection.

When **Audio Out** is set **Fixed**, the audio volume via the FIXED/VARIABLE AUDIO output terminals will be fixed.

When **Audio Out** is set **Variable**, the audio volume via the

Setup ▼	
Preset	
Easy Preset	
Auto Link	
AV NET	
Speaker	On
Audio Out ▶	Fixed
Language	中文 ENGLISH
Text Language	EAST EUROPE
⊖ Select ◑ Set (RETURN) Return	

FIXED/VARIABLE AUDIO output terminals will be variable. You can control the volume by pressing **Volume up/down** buttons on the remote control unit of the TV set.
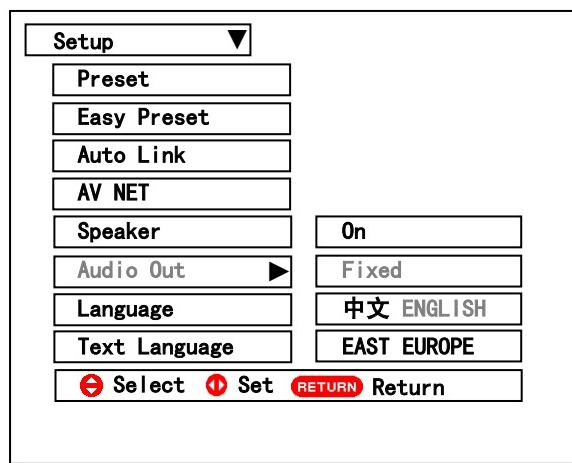
Note:

Please lower the volume of equipment to prevent damage to its speakers or hearing distorted sound when connecting the FIXED/VARIABLE AUDIO output terminals on the TV to the stereo system equipment.

【Language】 Refer to page 14.

【Text Language】

Follow the steps on page 23 to enter the **Setup** menu, then select the **Text Language** option as shown on the right.

Press the ◀ ▶ cursor buttons to set the language of text in your region. You can choose the **Text Language** options such as **EAST EUROPE**, **ARABIC**, **IRANIAN** and **WEST EUROPE**.

| Setup ▼	
Preset	
Easy Preset	
Auto Link	
AV NET	
Speaker	On
Audio Out	Fixed
Language	中文 ENGLISH
Text Language ▶	EAST EUROPE
⊖ Select ◑ Set (RETURN) Return	

MAGIC FOCUS

Over a period of time, the picture tubes can drift out of alignment due to abnormal bumps and vibrations or shifting of the TV. You may then notice that there are color rings or halos around the objects in the picture. You may have to converge (align) the colors(refer to note*1). If the picture on the screen is very clear, you may skip the below procedures.

The TV provides two modes of convergence adjustment (**AUTO CONVERGENCE** and **MANUAL CONVERGENCE**). Please ensure that the TV is powered on for at least 20 minutes before you proceed with the convergence adjustment.

AUTO CONVERGENCE

Press the **MAGIC FOCUS** button on the side panel for one second or so to enter the **AUTO CONVERGENCE** mode. At anytime during this convergence correction process, you may press the **MAGIC FOCUS** button to exit, and the picture condition will remain unchanged.
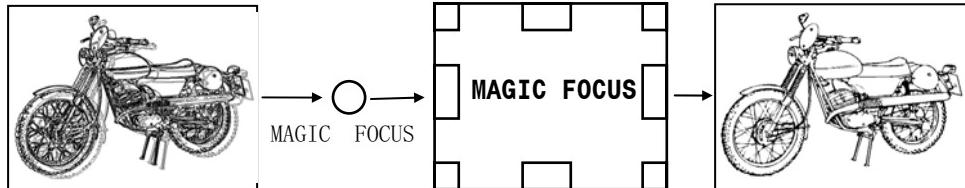
This process will take approximately 20 seconds. (Do not move the TV during this auto convergence process.)

MANUAL CONVERGENCE

Press and hold the **MAGIC FOCUS** button for more than 3 seconds to enter the **MANUAL CONVERGENCE** mode.
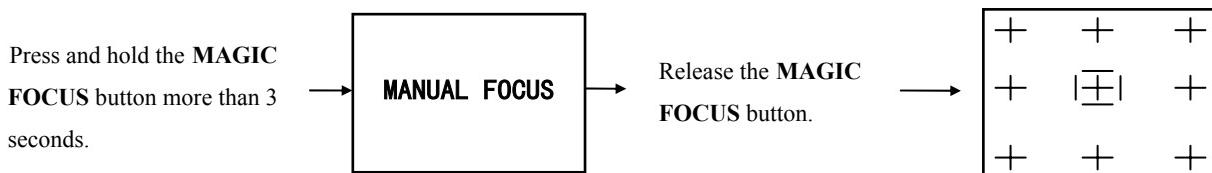
(1) Press the ▲ ▼ ◄ ► cursor buttons to move the selection box to select the adjustment point. Press the ENTER button to change the color of the selection box to red. Press the ▲ ▼ ◄ ► cursor buttons to adjust red convergence.

Note: Press the number buttons (2, 5, 4, 6) can also move the selection box to select the adjustment point, and then to adjust red convergence directly.

(2) Press the ENTER button to change the selection box to blue. Press the ▲ ▼ ◄ ► cursor buttons to adjust blue convergence.

(3) Press the ENTER button to change the selection box to white. Press the ▲ ▼ ◄ ► cursor buttons to move the selection box to select another adjustment point, then perform (1)~(2) to adjust.

Notes: 1. During the adjustment, press the ENTER button frequently to return to the moving mode (|‾| is shown in white, which means the selection box is in the moving mode.) and affirm convergence of the selection box so as to get the best convergence.

2. If you cannot insure perfect alignment, please try to get balance in alignment between |‾| and ＋ .

(4)When adjustment is done, press the MENU button and the following screen will display as below. Press the number keys to perform the following procedure.

[0]: To cancel the adjusted data and exit from adjustment mode.

[1]: **To save the adjusted data and exit from adjustment mode.**

[2]: To return to manual convergence mode.

[3]: To recall the adjusted data from previous auto convergence and return to manual convergence mode.

```
PLEASE
ENTER NUMBER
  CANCEL : [ 0 ]
  DONE   : [ 1 ]
  BACK   : [ 2 ]
  RESET  : [ 3 ]
```

Notes:

1) During the adjustment, you are suggested to adjust again and again, and confirm the alignment of the selection box in the moving mode.

2) If there is no operation for 3 minutes from the remote control unit, the TV will exit from **MANUAL CONVERGENCE** mode.

Note*1：The TV has three color projection tubes: one for red, one for green and one for blue. When mixed together in the proper proportion, the output of these three color tubes can produce any color. To produce these colors, however, the beams must be precisely aligned over each other so that the color can be mixed. The process of aligning these picture beams is called **convergence**.

MULTI PICTURE

The **Multi Picture** function of this projection TV provides two modes, **Split** and **P in P**. To use the **Multi Picture** function allows you to enjoy the programs easily and comfortably.

In normal picture mode, press the MULTI PIC. button to enter the **Split** or **P in P** mode.

【Split】

Follow the steps on page 20 to enter the **Function** menu and select the **Multi Picture** option, then enter the **Multi Picture** menu and select the **Multi Picture** option as shown on the right.

Press the ◄ ► cursor buttons to set **Multi Picture** option to **Split** mode, then exit from the menu.


```
Multi Picture    ▼
   Multi Picture  ►      Split
   CH Surf               3
   Freeze                Still
   HP Select             A / B
   Reset

   ⊖Select ⊕Set  RETURN Return
```

● In normal picture mode, press the MULTI PIC. button to enter the **Split** mode as shown below. Picture A and B will show the programs of two channels respectively.

● Once you have entered the **Split** mode, press the A/B button to select any one of the two pictures. A red ◀》 symbol will appear on top of the selected picture, indicating:

（1）The TV speakers will output the sound from the selected picture.

（2）The monitor out terminals will output audio and video signals from the selected picture.

（3）The operations such as program selection, etc. are valid for the selected picture. However, the program No. selected in one picture cannot be the same as that in the other one. Otherwise, the characters **!Not Available** will appear.
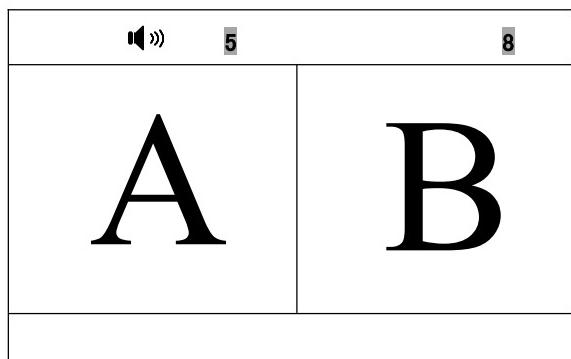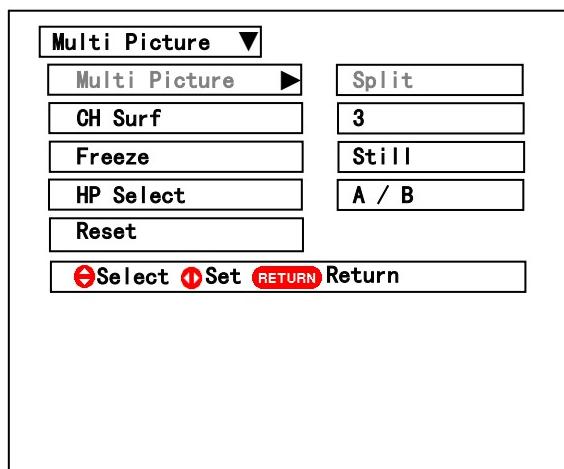
Notes：

（1）When the RECALL button is pressed, the picture A and B will display their respective program No. instantly, and the red ◀》 symbol will appear on the top of the selected picture momentarily.

（2）If the **HP Select** option in the **Multi Picture** menu is set to **B**, the headphone terminal of the side panel will always output the sound from picture **B**. If the **HP Select** option in the **Multi Picture** menu is set to **A/B**, the headphone terminal of the side panel will output the sound from the selected picture.

● In the **Split** mode, you can press the SWAP button to switch between the two pictures, ie, to exchange the program sources of picture A and B.

● If the **Freeze** option in the **Multi Picture** menu is set to **Still**, while in the normal TV mode, pressing the FREEZE button will enter the **Split** mode automatically. Picture A will display the current active program and picture B will display a freeze frame of the TV program captured at the moment you press the FREEZE button. MONITOR OUT terminals will output audio and video signals from picture A. Please refer to page 37 for information if the **Freeze** option in the **Multi Picture** menu is set to **Strobe**.

● In the **Split** mode, the POSITION button does not work.

● In the **Split** mode, press the MULTI PIC. or the RETURN button to exit.

● In the **Split** mode, you may enter the **Audio** menu to make adjustment by pressing the MENU button. However, if you enter other menus such as **Picture,** it will exit from the **Split** mode.

MULTI PICTURE

【P in P】

Follow the steps on page 20 to enter the **Function** menu and select the **Multi Picture** option, then enter the **Multi Picture** menu and select the **Multi Picture** option as shown on the right. Press the ◄ ► cursor buttons to set the **Multi Picture** option to **P in P** mode, then exit from the menu.

```
┌─────────────────────────────────────────────┐
│  ┌─────────────────┐                          │
│  │ Multi Picture  ▼│                          │
│  └─────────────────┘                          │
│   ┌────────────────┐  ┌────────────────┐     │
│   │ Multi Picture ►│  │ P in P         │     │
│   └────────────────┘  └────────────────┘     │
│   ┌────────────────┐  ┌────────────────┐     │
│   │ CH Surf        │  │ 3              │     │
│   └────────────────┘  └────────────────┘     │
│   ┌────────────────┐  ┌────────────────┐     │
│   │ Freeze         │  │ Still          │     │
│   └────────────────┘  └────────────────┘     │
│   ┌────────────────┐  ┌────────────────┐     │
│   │ HP Select      │  │ A / B          │     │
│   └────────────────┘  └────────────────┘     │
│   ┌────────────────┐                          │
│   │ Reset          │                          │
│   └────────────────┘                          │
│   ┌──────────────────────────────────────┐   │
│   │ ⊖Select ◑Set (RETURN) Return         │   │
│   └──────────────────────────────────────┘   │
└─────────────────────────────────────────────┘
```

● In normal TV mode, press the MULTI PIC. button to enter the **P in P** mode as shown below. Picture A and B will show the programs of two channels respectively.

● **P in P** mode will have different display formats according to the signal format received.

（1）When both the main picture and sub picture are receiving from RF, video or component signals (525i or 625i) or HDMI signal (525i or 625i), the **P in P** mode will display as shown in figure 1.
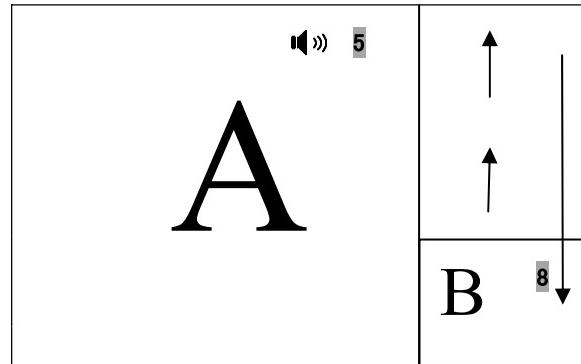

Figure 1.

Note: In this mode, press the SWAP button to exchange the program sources of picture A and B.

（2）When the main picture receives 1125i HD signal and the sub picture receives RF, video or component signals (525i or 625i) or HDMI signal (525i or 625i), the **P in P** mode will display as shown in figure 2.
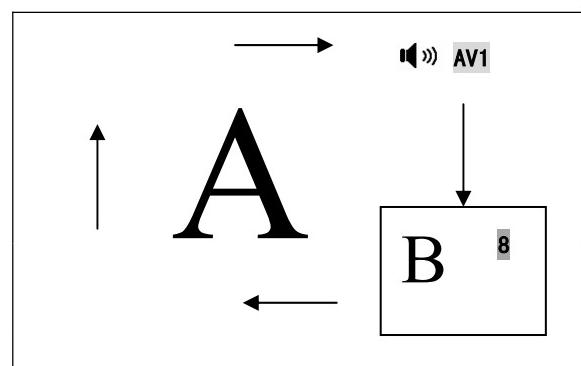

Figure 2.

Note: In this mode, press the SWAP button, it will change from figure 2 condition to figure 1. However, picture B will not be displayed normally and the **!** symbol will appear. This is normal.

MULTI PICTURE

●Once you enter the **P in P** mode, press the A/B button to select any one of the two pictures. A red ◀》 symbol will appear on top of the selected picture, indicating:

（1）The TV speakers will output the sound from the selected picture.

（2）The monitor out terminals will output audio and video signals from the selected picture.

（3）The operations such as program selection, etc. are valid for the selected picture. However, the program No. selected in one picture cannot be the same as that in the other one. Otherwise the characters **!Not Available** will appear.

Notes:

（1）When the RECALL button is pressed, picture A and B will display their respective program No. instantly, and a red ◀》 symbol will appear on top of the selected picture momentarily.

（2）If the **HP Select** option in the **Multi Picture** menu is set to **B**, the headphone terminal of the side panel will always output the sound from picture **B**. If the **HP Select** option in the **Multi Picture** menu is set to **A/B**, the headphone terminal of the side panel will output the sound from the selected picture.

●Press the POSITION button to move picture B on the screen in sequence as shown on previous page. Do not fix picture B on a particular position of the screen for a long time, this will damage the PRT.

●In the **P in P** mode, you can press the MULTI PIC. or the RETURN button to quit.

●In the **P in P** mode，you can press the MENU button to enter the menu, then select the **Audio** option to perform audio adjustment. However, if you enter other menus such as **Picture**, it will exit from the **P in P** mode.

Note: Not all input signal formats are valid for **P in P**. Sometimes, the signal may be able to be displayed in TV mode before entering **P in P**, it may not be able to be displayed once in the **P in P** mode. In such case, the characters **!Invalid Signal** will appear in picture A, or the **!** symbol will appear in picture B. This is normal.

CH SURF FUNCTION

The **CH Surf** function of this TV provides two modes, mode **3** and mode **12**. To use this function allows you to enjoy the programs easily and comfortably.

In normal picture mode, press the CH SURF button to enter mode **3** or mode **12**.

【Mode 3】

Follow the steps on page 20 to enter the **Function** menu and select the **Multi Picture** option, then enter the **Multi Picture** menu and select the **CH Surf** option as shown on the right. Press the ◄ ► cursor buttons to set the **CH Surf** option to mode **3**, then exit from the menu.

```
Multi Picture   ▼
  ┌─────────────────┐   ┌─────────────┐
  │ Multi Picture   │   │ P in P      │
  ├─────────────────┤   ├─────────────┤
  │ CH Surf       ► │   │ 3           │
  ├─────────────────┤   ├─────────────┤
  │ Freeze          │   │ Still       │
  ├─────────────────┤   ├─────────────┤
  │ HP Select       │   │ A / B       │
  ├─────────────────┤   └─────────────┘
  │ Reset           │
  └─────────────────┘
  ┌──────────────────────────────────┐
  │ ⊖Select ⊕Set RETURN Return        │
  └──────────────────────────────────┘
```
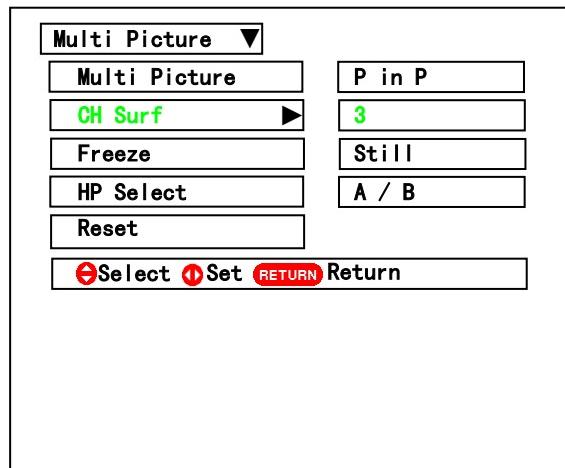
● In normal TV mode, press the CH SURF button to enter mode **3** (4-Picture display mode) as shown below.

Picture A will display the current active program. The speakers and the headphone jack will output the sound from picture A. The monitor out terminals will output audio and video signals from picture A too.

Picture B1, B2 and B3 will rotate to refresh individual program after a few seconds starting from the program No.0, except those programs that are skipped.

● When entering mode **3**, you can select the program for picture A by pressing the program up/down buttons ▲ ▼ or number buttons. As for the pictures in group B, you can press the ▲P+ ▼P- buttons to select one of the pictures among the B1, B2, B3 picture. The color of the program No. in the selected picture will turn from white to green. If you press the ENTER button, the picture selected in group B will be switched to the picture A.
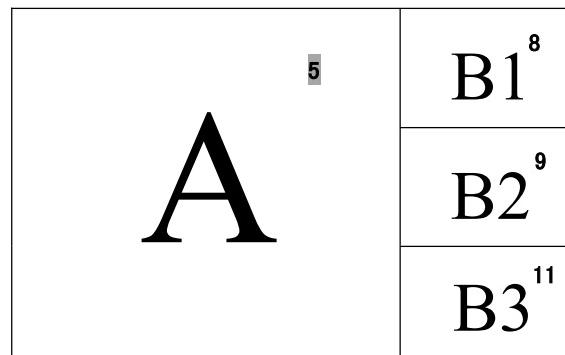
● In this mode, press the CH SURF or the RETURN button to quit.

● In this mode, you can enter the **Audio** menu to perform the adjustment. However, if you enter other menus such as **Picture**, it will exit from the 4-Picture display mode.

● In this mode, the A/B , SWAP and POSITION buttons are invalid.

Note: Not all input signal formats are valid for mode **3**. Sometimes the signal may be able to be displayed in TV mode before entering mode **3**, it may not be able to be displayed once in mode **3**. In such case, the characters **!Invalid Signal** will appear in picture A, or the ！symbol will appear in picture B. This is normal.

CH SURF FUNCTION

【Mode 12】

Follow the steps on page 20 to enter the **Function** menu and select the **Multi Picture** option, then enter the **Multi Picture** menu and select the **CH Surf** option as shown on the right. Press the ◄ ► cursor buttons to set the **CH Surf** option to mode **12**, then exit from the menu.

● In normal TV mode, press the CH SURF button to enter mode **12**(12-picture) as shown below.

The 12 pictures will rotate to refresh individual program after a few seconds starting from the program No.0 except for those skipped program. If the preset channels are less than 12, it will display the actual number of searched program. If the preset channels are more than 12, use the **Page up/down** buttons to select the next group of program.
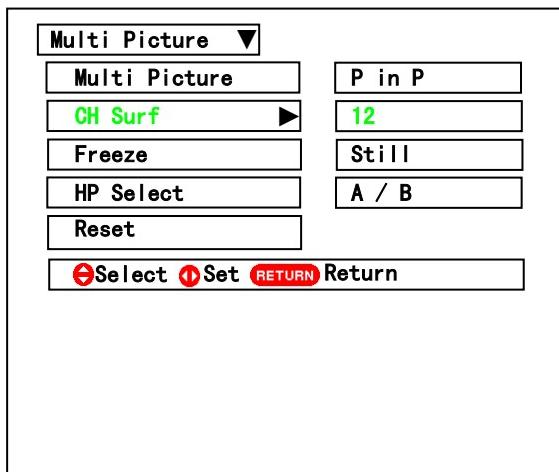
● In this mode, you can press the ▲ ▼ ◄ ► cursor buttons to select one of the pictures, and the program No. of the selected picture will turn from white to green. If you press the ENTER button to quit, the selected picture will fill the entire TV screen.

● In this mode, directly entering the program No. by using the number buttons will quit this mode, and the selected picture will fill the entire TV screen.

● In this mode, there will be no signal output from the speakers, the headphone jack and the monitor out terminals.

● In this mode, press the CH SURF or the RETURN button to quit. If you enter the menu by pressing the MENU button, it will exit from this mode.

● In this mode, the A/B, SWAP and POSITION buttons are invalid.


The **Strobe** function is as shown below.

Follow the steps on page 20 to enter the **Function** menu and select the **Multi Picture** option, then enter the **Multi Picture** menu and select the **Freeze** option. Press the ◄ ► cursor buttons to set the **Freeze** option to **Strobe**, then exit from the menu.

● In normal TV mode, press the FREEZE button to enter the mode **12** automatically. The 12th picture will display the current active program. The other 11 pictures will display the continuous freeze frames of the TV program captured at the moment you press FREEZE. This function is not valid for all input signal formats. When ！ **Not Available** appears, it is invalid.

● In this mode, you can quit by pressing the RETURN or the FREEZE button.

● In this mode, you can enter the **Audio** menu to perform the adjustment. However, if you enter other menus such as **Picture**, it will exit from this mode.

● The monitor out terminals will output the video and audio signals from the current active program.

● In this mode, the A/B, SWAP and POSITION buttons are invalid.

Multi Picture ▼	
Multi Picture	P in P
CH Surf ►	12
Freeze	Still
HP Select	A / B
Reset	
⊖Select ⊕Set RETURN Return	

1	2	3	4
5	6	7	8
9	10	11	12

BRIDGE MEDIA FUNCTION

The TV provides two kinds of methods to view still or motion pictures from your digital camera.

1. Connect your digital camera or card reader to the PHOTO INPUT Ⅱ (USB slot) on the side panel of the TV using a USB cable.
2. Insert the SD or MMC card into SD memory card slot as shown below.
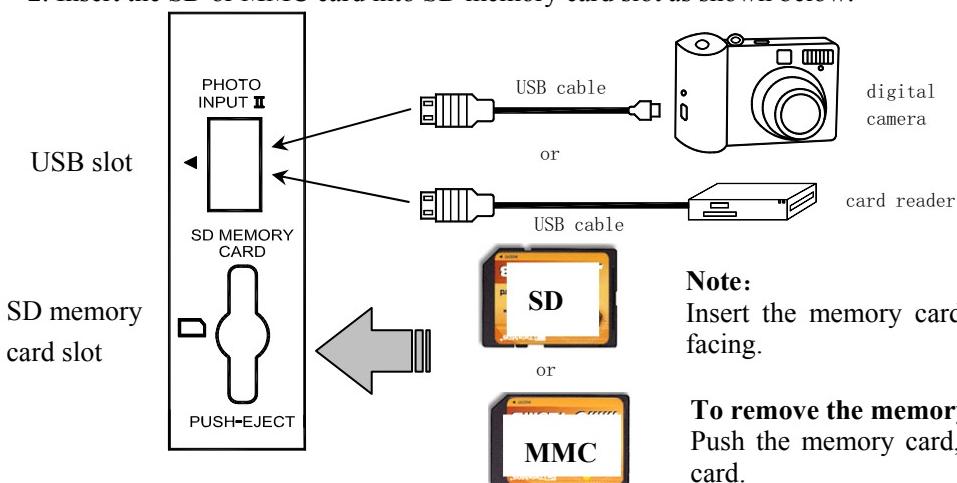
Note：
Insert the memory card to the slot with its right-side facing.

To remove the memory card
Push the memory card, and then pull out the memory card.

Usage

1. Please turn off the power or set the TV in standby before using this function.
2. Set the digital camera to the same state as when connecting to PC, which is described in the digital camera instruction manual. Then turn off the digital camera.
   Note: Please insert memory card into card reader before connecting the card reader.
3. Connect your digital camera to the USB slot using a USB cable. Then turn on the power of the TV and the camera. Some camera need to be turned on before connecting to the USB cable, please refer to the camera instruction manual. If you do not follow the instructions stated in the camera instruction manual, it may be abnormal.
   Note: Refer to the above illustration for using SD or MMC memory card. Turn on the TV after inserting the memory card into the SD memory card slot.
4. If display is normal, the bridge media status indicator will light up after a few seconds.
5. To use the photo display function:

1) PHOTO BROWSE

Press the TV/PHOTO button to switch the TV from TV mode to photo display mode. A [📷] symbol will appear on left top of the screen for a while and the first sixteen photos will be shown on the screen. (If the photos stored in the memory card are less than 16, the TV will display the photos available only.) Press the **Page up/down** buttons to show the next page of photo display. Select one of the sixteen photos using the ▲ ▼ ◄ ► cursor buttons (or number buttons), the frame of the selected photo will be indicated in green. Press the ENTER button to display the selected photo as shown on the right. The related information of this photo will appear on the lower right corner of the photo when the RECALL button is pressed. For example, the information of this photo indicates as follows:

No. 1/6： There are six photos in total, this is the first one.

05/05/28： May 28, 2005

1600×1200： Pixels :1600×1200
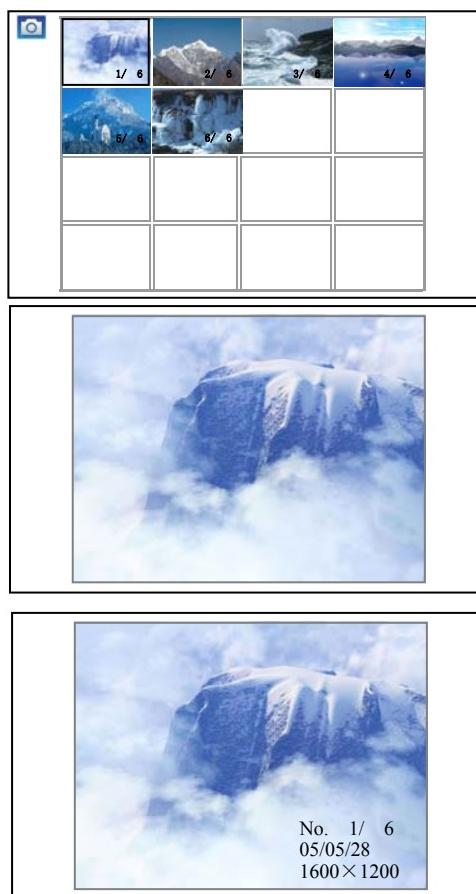
BRIDGE MEDIA FUNCTION

When browsing a photo in full screen, you may change the photo using the ▲ ▼ cursor buttons, the **Program up/down** buttons or number buttons. If you press the ENTER button, it will return to 16-photo mode.

While displaying the photo, press the TV/PHOTO button to switch photo display mode to TV mode.

While displaying the photo, press the RETURN button to return to 16-photo mode.

In the 16-photo mode, press the TV/PHOTO once more to switch 16-photo mode to 16-motion-picture list mode, and a 🎥 symbol will appear on left top of the screen for a while. Refer to **"6.To use motion picture display function"** for more information.

In the 16-photo mode, press the RETURN button to switch 16-photo display mode to TV mode.

2) ROTATE FUNCTION

（1）While displaying one photo in full screen, press the ROTATE button to rotate the photo to 0°, 90°, 180° or 270°. The symbol such as《 ↻ 0 》is displayed on the lower left corner of the screen accordingly for a while.

（2）In 16-photo mode, select the photo you wish to rotate and press the ROTATE button to display a 《 ↻0 》 on the lower left corner. Press the ROTATE button continuously to rotate the selected photo （0°, 90°, 180°, 270°）.

3) SLIDE SHOW FUNCTION

（1）Follow the steps on page 22 to set the **Slide Interval** among **5sec**, **10sec** and **30sec**.

（2）In photo display mode, press the SLIDE SHOW button to scroll the photos starting from the first one or current photo (refer to page 22 on the **Slide Mode** explanation) at fixed slide intervals.

（3）Press the ENTER button to stop slide show, and a ENTER Start will appear on the lower left side. If the ENTER button is pressed, the TV will return to slide show mode. If there is not operation within one minute, the TV will return to slide show mode automatically.

（4）After finishing the slide show, the TV will return to 16-photo mode.

（5）In the process of slide show, the **Rotate** function is not available.

（6）In the process of slide show, press the TV/PHOTO button to switch slide show mode to TV mode.

4) OTHER FUNCTIONS

In photo mode, there are other functions such as **Background**, **Slide Mode** and **Slide Music**, please refer to page 22.

6.To use motion picture display function:

1) ENJOY MOTION PICTURE

In the 16-photo mode, press the TV/PHOTO button once more to switch 16-photo mode to 16-motion-picture list (thumbnail) mode. A 🎥 symbol will appear on the left top of the screen for a while and the first sixteen motion pictures' thumbnail will be shown on the screen. (If the motion pictures stored in the memory card are less than 16, the TV will display the motion pictures available only.) Press the **Page up/down** buttons to show the next page of thumbnail. Select one photo in thumbnail using the ▲ ▼ ◄ ► cursor buttons (or number buttons), the frame of the selected thumbnail will be indicated in green. Press the ENTER button to play the selected motion picture as shown on the right. It will return to 16-motion-picture list mode after finishing playing.

Note: In 16-motion-picture list mode, if a 🔇✕ symbol appears on a thumbnail, it means that the audio format of this motion picture cannot be supported. If a ❗ symbol appears on a thumbnail, it means that this motion picture cannot be played.

When enjoying motion picture, press the RETURN button to return to 16-motion-picture list mode. If you press the RETURN button once more, it will return to 16-photo mode.

When enjoying motion picture, press the TV/PHOTO button to switch motion picture mode to TV mode.
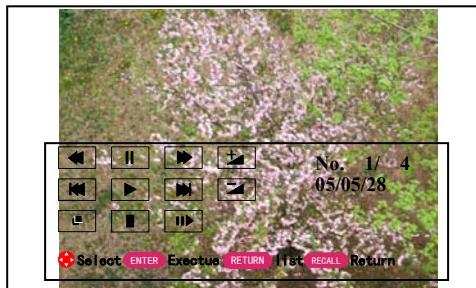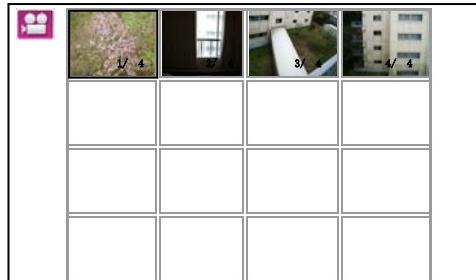
BRIDGE MEDIA FUNCTION

2) PLAY MOTION PICTURE

When enjoying motion picture, you can press **RECALL** button to display the information and control menu on the bottom side of the screen. The control menu indicates as shown below.

Symbol	Function	Symbol	Function
◄◄	Fast backward	⊡	Zoom
►►	Fast forward	►	Play
◄◄	*1)	‖	Pause
►►|	Skip forward	±◢	Volume up
■	Stop	◢	Volume down
‖►	Slow play		

No. 1/4：   There are four motion pictures in total, this is the first one.
05/05/28：   May 28, 2005

Press the ▲ ▼ ◄ ► cursor buttons to select the function symbol on screen display, and then press the **ENTER** button to control the motion picture. For example, if you want to pause the motion picture, press the ▲ ▼ ◄ ► cursor buttons to select the ‖ symbol, and it will show in green, indicating it is selected. Then press the **ENTER** button, the color of this symbol changes green to yellow, the motion picture will be paused.

*1) When the ◄◄ symbol is selected, press the **ENTER** button to play the motion picture from the beginning itself. When the ◄◄ symbol is shown in yellow, press the **ENTER** button once more to play the last motion picture.

Remarks：
（1） In bridge media mode, the characters ！ **No Connection** will appear on the screen if the connected equipment is unplugged or not connected properly.
In TV mode, the characters ！ **No Connection** will appear on the screen when you press the **TV/ PHOTO** button if the equipment is not connected.
（2） In bridge media mode, the optional picture modes are **Favorite(Photo)** and **Dynamic(Photo)** only.
（3） In photo display mode, the TV will exit from the photo mode automatically when you enter the **Timer**, **Setup** or **Function** menu. In motion picture mode, the TV will exit from the motion picture mode automatically when you enter the **Timer**, **Setup** or **Function** menu.
（4） With the photo display mode or the motion picture playing being over, the TV will automatically reduce the contrast and color setting value of the picture displayed if there is not operation for more than three minutes. This may prevent damaging the PRT.
（5） In bridge media mode, multi picture, channel surf, freeze and aspect mode functions are not available.
（6） The TV can display maximum 500 photos or motion pictures.
（7） When the bridge media status indicator is flickering, it indicates that TV is accessing the data in memory card. At this time, do not turn off the TV or cut off the connection, otherwise the data in memory card may be damaged.

Explanations：
（1） The TV can display digital pictures from digital cameras which meet DCF Standard or the motion pictures whose format is Motion JPEG, PhotoJPEG, MPEG1 or MPEG4 (Supported audio formats of motion pictures are PCM, ADPCM and MPEG1-Layer2.). Files that were copied or edited on a computer may not be displayed on the TV screen.
（2） Supported JPEG image sizes are up to 8176×8176. JPEG format should conform with DCF standard.
（3） The USB slot on the TV can only connect to digital camera or card reader whose current consumption must be less than 500mA.
（4） The USB slot on the TV cannot connect the camera or card reader with USB hub.
（5） When all-in-one card reader is used, please insert one memory card at a time.
（6） Not all digital camera or card reader or SD card or MMC card is compatible with the TV. Similarly, compatibility exists in the memory card and digital camera or card reader.
（7） Do not use the USB slot and the SD memory card slot at one time.
（8） The TV can only display photos and motion pictures (include audio) in the digital camera, the audio that was recorded by the digital camera or appended to a photo cannot be played on the TV.
（9） Supported motion pictures of MPEG4 are up to 352×288, and motion pictures of Motion JPEG, PhotoJPEG and MPEG1 are up to 640×480. When the motion picture is played, it may drop frames. This is normal.

BRIDGE MEDIA FUNCTION

（10）When the batteries in the digital camera were exhausted, the photo or motion picture may be displayed abnormally.

（11）The memory card used in the digital camera must be formatted by the digital camera. If it is formatted by the computer, this function may be abnormal.

（12）The rule of filename and directory structure in the memory card:
  * Files should be placed on a sub directory** of a main directory with a "**DCIM**" file name format
    **Files should be placed on a sub directory name with 8 characters (E.g. 123ABCDE), 1st to 3th: numbers (100~999); 4th to 8th: letters.
    ***File names should be 8 characters (E.g. ABCD1234.jpg), 1st to 4th: letters; 5th to 8th: numbers (0001~9999).

（13）The effect playing motion pictures through SD memory card slot may be better than through USB slot.

（14）When the PictBridge compatible digital camera is connected to USB slot on the TV through PTP, you can only play photos. Refer to the digital camera instruction manual for PictBridge in detail.

（15）Some suggestions for playing the motion pictures:
  a) If your digital camera supports SD or MMC memory card, insert SD or MMC card to SD slot directly for viewing photos or motion pictures.
  b) If your digital camera is PictBridge compatible and there are two options in connection, PTP and Mass Storage connection, when you set the digital camera to Mass Storage, you can play both photos and motion pictures.
  c) If your digital camera is not PictBridge compatible, use card reader to connect with USB slot on the TV. Please note that we do not guarantee all memory cards and card readers are compatible with the TV.

（16）The photos or motion pictures may not be displayed correctly if you extend the USB cable.

（17）Do not use this function other than private purpose. It may infringe the copyright law.

（18）Back up all of the data in the memory card in case of being damaged due to unexpected accident. We are not liable for any losses caused by misuse or malfunction.

Information display

Status	BRIDGE MEDIA status indicator	Display on screen
Accessing	blinking	
Normal	always on	
Not connected	always off	!No Connection
Format not available	always off	!No Connection
Abnormal	always off	!No Connection
No file	always on	!No File

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AV NET

The TV has the **AV NET** function. This function enables you to control your audio/video equipment such as VCR, DVD player, Set-Top-Box, etc with the remote control function. You can control your equipment with the applied remote control unit of the TV after using this function.

The rear panel of the TV has two IR BLASTER output jacks. The TV comes with two IR BLASTER cables. Each IR BLASTER cable can control two audio/video equipment. Please refer to the following examples when using the **AV NET** function.

【**Connection of the external audio/video equipment**】

1. Please connect your external audio/video equipment by referring to the following example. (Below shows **INPUT1** is connected to a DVD player, and **INPUT3** is connected to a VCR)
2. Please insert the plug of the IR BLASTER cable into the IR BLASTER output jacks on the rear panel of the TV.
3. Please place the IR mouse near and face the IR sensor of the DVD player and the VCR. Please refer to the instruction manual of the DVD player and the VCR for the IR sensor location.
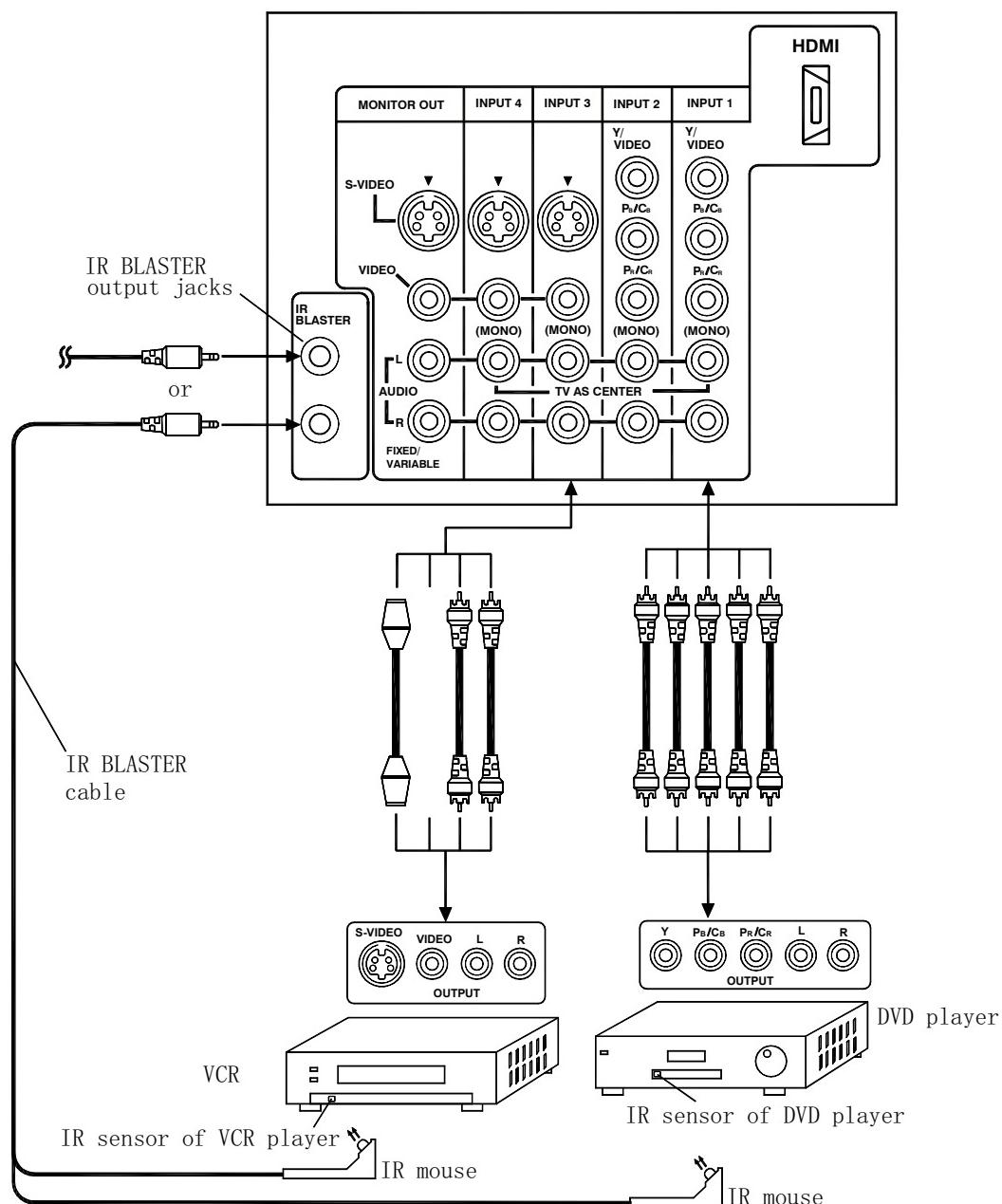
AV NET

【**Setting up the type codes and the input terminals of the external audio/video equipment**】
You must set up the **Type** and **Input** of the corresponding audio/video equipment after the audio/video equipment and the IR BLASTER cable are connected to the TV so that you can control your external equipment with the **AV NET** function. If you fail to find the type codes of your external audio/video equipment or your equipment's brands are not in the list of models, please refer to page 46-48 on 【**How to learn the remote code of the external audio/video equipment**】 to learn the remote code of the external audio/video equipment.
The DVD player which is connected to the **INPUT1** terminals is used as an example to illustrate how to set the **Type** and the **Input** of the external audio/video equipment.

1. Press the MENU button to display menu. Press the ▲ ▼ cursor buttons to select the **Setup** item and press the ENTER button to enter the **Setup** menu. Then press the ▼ cursor button to select the **AV NET** item as shown on the right.

Setup ▼	
Preset	
Easy Preset	
Auto Link	
AV NET ▶	
Speaker	On
Audio Out	Fixed
Language	中文 ENGLISH
Text Language	EAST EUROPE
⊖Select ENTER Set RETURN Return	
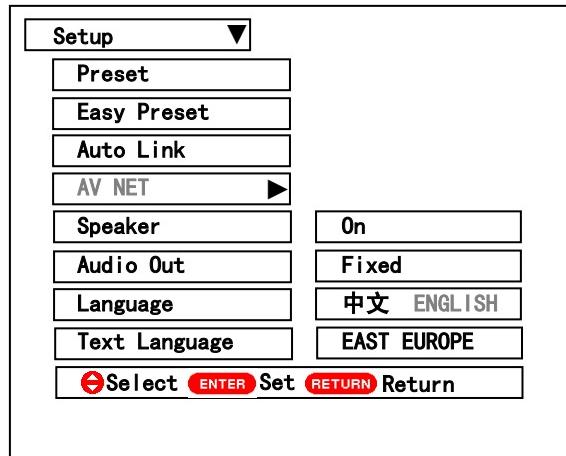
2. Press the ENTER button to enter the **AV NET** menu. Press the ▲ ▼ cursor buttons to select the **DVD** item as shown on the right and the item will be displayed in green, indicating it is selected.

The devices corresponding to the external equipment are shown as below.

AV NET ▼			
Device	Type	Input	Test/Learn
DVD ▶	——	AV1	⏻
VCR	0042	Off	⏻
AVR	1801	Off	⏻
CD	0032	Off	⏻
CBL	0011	Off	⏻
STB	0819	Off	⏻
Custom	DVD2	Off	Learn
⬥ Select RETURN Return			

Device	External equipment
DVD	DVD player
VCR	VCR
AVR	AV receiver or amplifier
CD	CD player
CBL	Cable TV set-top box
STB	Satellite set-top box

As for the **Custom**, please refer to page 46-48 on 【**How to learn the remote code of the external audio/video equipment**】.

3. Press the ▶ cursor button to enter the **Type** item as shown on the right and the "——" will be displayed in green, indicating it can be altered. Press the number from 0 to 9 on the remote control unit to input the type code of your external audio/video equipment. (Please refer the type code lists for the codes of your external audio/video equipment.) For example, the type code of a DVD player is 0664, then 0, 6, 6, 4 are inputted.

Note:
Some brands have a few type codes, please find one of the codes that is suitable for your external audio/video equipment.

AV NET ▼			
Device	Type	Input	Test/Learn
DVD ▶	——	AV1	⏻
VCR	0042	Off	⏻
AVR	1801	Off	⏻
CD	0032	Off	⏻
CBL	0011	Off	⏻
STB	0819	Off	⏻
Custom	DVD2	Off	Learn
⊖Select⓪—⑨Set RETURN Return			

AV NET

4. Press the ► cursor button to enter the **Input** item of DVD as shown below. Press the ▲ ▼ cursor buttons to select the terminal connected to your external audio/video equipment. You can choose **Off**, **AV1**, **AV2**, **AV3**, **AV4** or **AV5**. **AV1** is chosen as the DVD player in the example is connected to the **INPUT1** terminals.

Notes:
For DVD, AVR, CD, STB, DVD2, AVR2, CD2 and STB2, you can choose the **Input** item from **Off**, **AV1**, **AV2**, **AV3**, **AV4** or **AV5**.
For VCR, CBL, VCR2 and CBL2, you can choose the **Input** item from **Off**, **AV1**, **AV2**, **AV3**, **AV4**, **AV5** or **TV (0P)**.
When using this function, the TV will switch to the AV1~AV5 mode automatically to the chosen **Input** item accordingly.
When using this function, the TV will switch to the program No.0 automatically if the **Input** item is set to **TV (0P)**.
When using this function, the TV will remain the current state if the **Input** item is set to **Off**.

AV NET ▼			
Device	Type	Input	Test/Learn
DVD ►	0664	AV1	⏻
VCR	0042	Off	⏻
AVR	1801	Off	⏻
CD	0032	Off	⏻
CBL	0011	Off	⏻
STB	0819	Off	⏻
Custom	DVD2	Off	Learn

⊖Select⊖Set RETURN Return

5. Press the cursor ► button to enter the **Test/Learn** option as shown on the right. When the option of the **Device** is supposed to be **DVD，VCR，AVR，CD，CBL** or **STB**, this **Test/Learn** option is **Test**.
Turn on the DVD player. Press the **ENTER** button, the ⏻ symbol will appear in yellow for about one second and the infrared signal will be emitted by the IR mouse. Please check that the power of your DVD player has the corresponding actions.
You can select the other buttons to test by pressing the ▲ ▼ cursor buttons.
The test buttons for DVD/CD are: ⏻ ►
The test buttons for VCR are: ⏻ ► P₊
The test buttons for CBL/STB are: ⏻ P₊
The test buttons for AVR are: ⏻ ◄▪►

AV NET ▼			
Device	Type	Input	Test/Learn
DVD ►	0664	AV1	⏻
VCR	0042	Off	⏻
AVR	1801	Off	⏻
CD	0032	Off	⏻
CBL	0011	Off	⏻
STB	0819	Off	⏻
Custom	DVD2	Off	Learn

⊖Select⊖Set ENTER Test RETURN Return

Please refer to page 45 on 【**Using the AV NET function**】 if the test succeeded.
Please use other type codes (if available) and repeat step 3 or refer to page 46-48 on 【**How to learn the remote code of the external audio/video equipment**】 if the test failed.

Notes：

（1）Not all audio/video equipment brands or models are suitable for the **AV NET** function even if the **Type** and the **Input** item have been set up.

（2）When the **Device** item is **Custom**, the **Test/Learn** option is **Learn**. Please refer to 【**How to learn the remote code of the external audio/video equipment**】 for more information on the **Custom** function.

AV NET

【Using the AV NET function】

You can use the **AV NET** function if the test succeeded. The DVD player which is connected to the **INPUT1** terminals is used as an example to illustrate how to use the **AV NET** function.

1. Press the AV NET button to display the menu as shown on the right. Press the ▲ ▼ cursor buttons to select **DVD** if you want to control the DVD player that is connected to the **INPUT1** terminals.
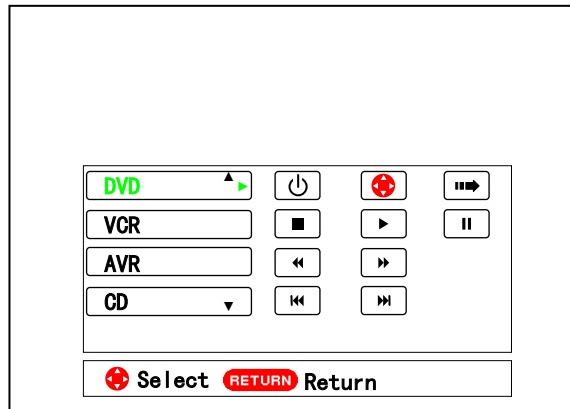
2. The TV will switch to the **AV1** mode* automatically by pressing the ▶ cursor button and the ⏻ item will be displayed in green simultaneously. Press the ENTER button, the ⏻ item will be displayed in yellow for about one second. The IR mouse will output infrared signal to turn on or turn off the DVD player's power.
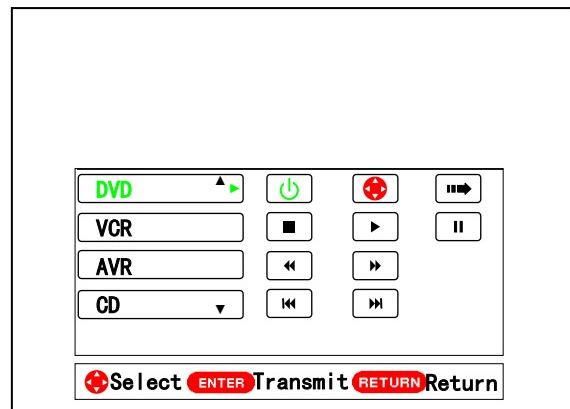
   Note*:
   The TV will switch to a corresponding mode automatically according to the **Input** setting of the **AV NET** menu. As the example shows, the set will switch to **AV1** mode automatically because the **Input** setting which corresponds to **DVD** item is **AV1**.

3. You can play the DVD by pressing the ▲ ▼ ◀ ▶ cursor buttons to enter the ▶ item and the ▶ item will be displayed in green. Press the ENTER button, the ▶ item will be displayed in yellow for about 1 second and the IR mouse will output infrared signal to DVD player, then the DVD player will play the disc.
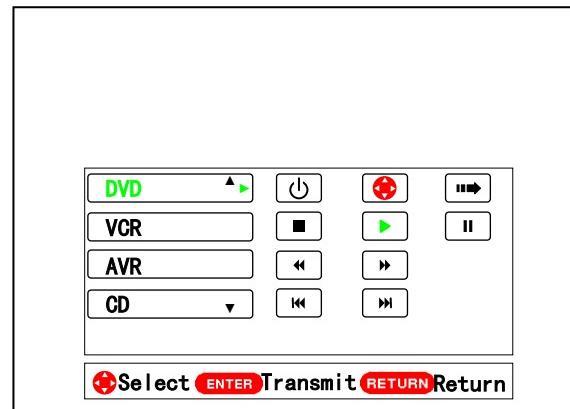
4. For the other function keys, please refer to step 3 and operate according to the corresponding hints on the screen.

   Note：
   (1) Press the ▲ ▼ ◀ ▶ cursor buttons to select the 🔴 item, and then press the ENTER button to enter the button menu operated by the cursor. At this point, if you press the cursor ▲ ▼ ◀ ▶ , MENU , ENTER , RETURN buttons on the remote control unit of the TV, they correspond to the ▲ ▼ ◀ ▶ , MENU , ENTER , RETURN buttons of DVD player.
   (2) Press the ▲ ▼ ◀ ▶ cursor buttons to select the ⏩ item, and then press the ENTER button to enter the next page of the menu.
   (3) The IR mouse may output nothing when you press some buttons on the menu. This is normal.
   (4) The TV provides some common function keys only for the external equipment of DVD, VCR, AVR, CD, CBL, STB, etc.

AV NET

【**How to learn the remote code of the external audio/video equipment**】

It enables you to realize the **AV NET** function by using this function if your external audio/video equipment's brands are not in the type code list. Please make sure that the IR BLASTER cable is connected as shown in 【**Connection of the external audio/video equipment**】 before you learn the remote codes.

The DVD player which is connected to the **INPUT1** terminals is used as an example to illustrate how to learn the remote codes of the external audio/video equipment.

1.Press the MENU button to display menu. Press the ▲ ▼ cursor buttons to select the **Setup** item, press the ENTER button to enter the **Setup** menu and then press the ▼ cursor button to choose the **AV NET** item as shown on the right.

Setup ▼	
Preset	
Easy Preset	
Auto Link	
AV NET ▶	
Speaker	On
Audio Out	Fixed
Language	中文 ENGLISH
Text Language	EAST EUROPE

🔴Select (ENTER) Set (RETURN) Return
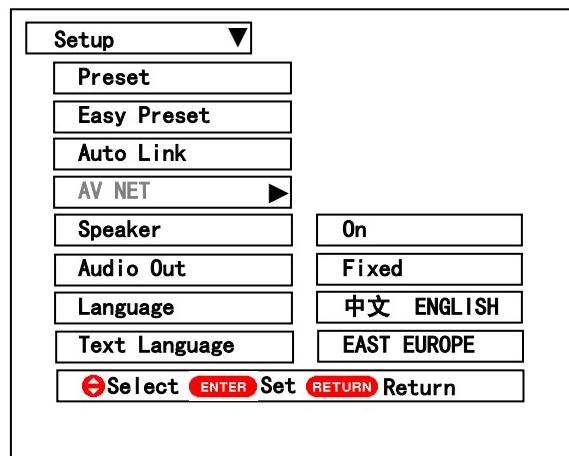
2.Press the ENTER button to enter the **AV NET** menu. Press the ▲ ▼ cursor buttons to select the **Custom** item as shown on the right.

AV NET ▼			
Type	Type	Input	Test/Learn
DVD	0664	AV1	⏻
VCR	0042	Off	⏻
AVR	1801	Off	⏻
CD	0032	Off	⏻
CBL	0011	Off	⏻
STB	0819	Off	⏻
Custom ▶	DVD2	Off	Learn

🔴 Select (RETURN) Return

3.Press the ▶ cursor button to enter the **Type** item of **Custom** option. At this point, you can choose the type options such as **DVD2**, **VCR2**, **AVR2**, **CD2**, **CBL2**, **STB2**. For example, if you want to learn the remote codes of the DVD player which is connected to the **INPUT1** terminal, please press the ▲ ▼ cursor buttons to select **DVD2**.

AV NET ▼			
Device	Type	Input	Test/Learn
DVD	0664	AV1	⏻
VCR	0042	Off	⏻
AVR	1801	Off	⏻
CD	0032	Off	⏻
CBL	0011	Off	⏻
STB	0819	Off	⏻
Custom ▶	DVD2	Off	Learn

🔴Select🟠Set (RETURN) Return

AV NET

4. Press the ▶ cursor button to enter the **Input** item of **Custom** option and then press the ▲ ▼ cursor buttons to select **AV1**.

Notes:
For DVD, AVR, CD, STB, DVD2, AVR2, CD2 and STB2, you can choose the **Input** from **Off**, **AV1**, **AV2**, **AV3**, **AV4** or **AV5**.
For VCR, CBL, VCR2 and CBL2, you can choose the **Input** from **Off**, **AV1**, **AV2**, **AV3**, **AV4**, **AV5** or **TV(0P)**.
When using this function, the TV will switch to the AV1~AV5 mode automatically to the chosen **Input** item accordingly.
When using this function, the TV will switch to the program No.0 automatically if the **Input** item is set to **TV (0P)**.
When using this function, the TV will remain the current state of current if the **Input** item is set to **Off**.

AV NET ▼			
Device	Type	Input	Test/Learn
DVD	0664	AV1	⏻
VCR	0042	Off	⏻
AVR	1801	Off	⏻
CD	0032	Off	⏻
CBL	0011	Off	⏻
STB	0819	Off	⏻
Custom ▶	DVD2	AV1	Learn

⬥ Select ⬥ Set   RETURN Return

5. Press the ▶ cursor button to enter the **Test/Learn** item of **Custom** option. The **Learn** item is selected and will be displayed in green.

AV NET ▼			
Device	Type	Input	Test/Learn
DVD	0664	AV1	⏻
VCR	0042	Off	⏻
AVR	1801	Off	⏻
CD	0032	Off	⏻
CBL	0011	Off	⏻
STB	0819	Off	⏻
Custom ▶	DVD2	AV1	Learn

⬥ Select ENTER Set   RETURN Return

6. Then press the ENTER button to enter **Learn** state as shown on the right. For example, you want to learn the code of DVD player's ⏻ button. Press the ▲ ▼ ◀ ▶ cursor buttons to select the ⏻ item and the ⏻ item will be displayed in green.

AV NET ▼
《DVD2》

⬥ Select RECALL Learn ENTER Test
CHI/II Reset RETURN Return
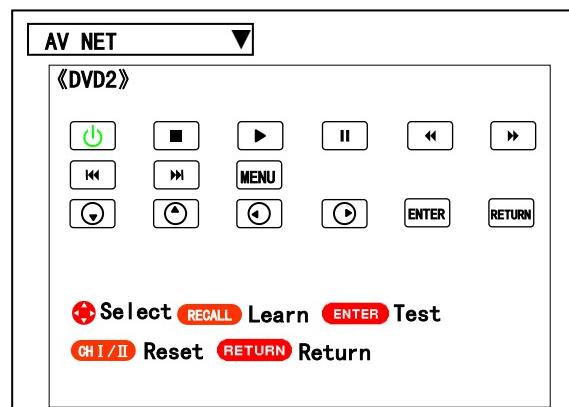
7. Press the RECALL button, the ⏻ item will be displayed in yellow and the word **"Learning"** will appear on the lower left of the screen. At this moment, put the remote control unit of DVD player near and face the screen center of the TV and press the ⏻ button on the remote control unit of DVD player.

Notes：
(1) You should press the ⏻ button on the remote control unit of DVD player while the word **"Learning"** is displaying.
(2) Do not continue pressing the ⏻ button while learning.

AV NET ▼
《DVD2》

⬥ Select RECALL Learn ENTER Test
CHI/II Reset RETURN Return
Learning
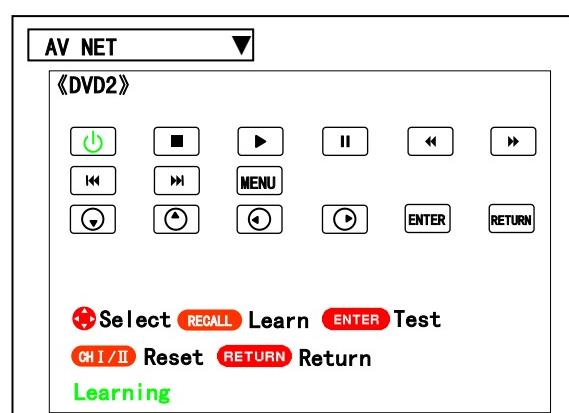
AV NET

8. The word **"Succeeded"** will be displayed on the lower left corner of the screen if the code is learnt. The frame of the ⏻ item will be in yellow, indicating this item has been registered.

The word **"Failed"** will be displayed on the lower left corner of the screen if the TV fails to learn the code. Please make sure that your operations are correct and re-do according to the above steps.

The **Not Available** will be displayed on the lower left corner of the screen if the TV is lack of enough internal memory's capacities. Please refer to the note (2) to clear the items which are seldom used in order to release the internal memory's capacities.

```
┌─────────────────────────────────────┐
│ AV NET              ▼                │
│ ┌───────────────────────────────────┤
│ │ 《DVD2》                           │
│ │                                    │
│ │  [⏻]  [■]  [▶]  [Ⅱ]  [◀◀] [▶▶]   │
│ │  [◀◀] [▶▶] [MENU]                 │
│ │  [◉]  [◉]  [◉]  [◉]  [ENTER][RETURN]│
│ │                                    │
│ │  ●Select RECALL Learn ENTER Test  │
│ │  CHⅠ/Ⅱ Reset RETURN Return        │
│ │  Succeeded                         │
│ └───────────────────────────────────┤
└─────────────────────────────────────┘
```
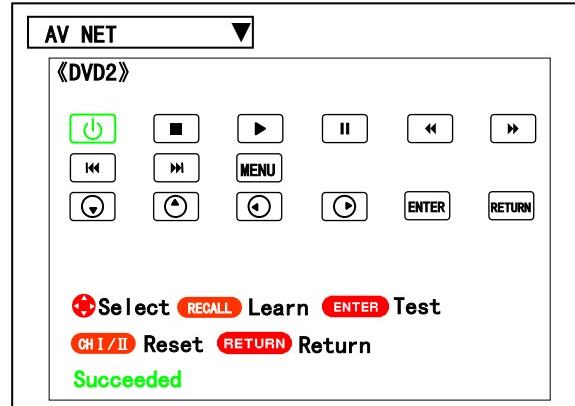
9. In order to check the **AV NET** function works properly, a test must be taken on the ⏻ item after the learning succeeds. Press the ENTER button and the ⏻ item will be displayed in yellow for about one second, the infrared signal will be output by the IR mouse. At this moment, the power of the DVD player should have corresponding action. If not, please check the connection and repeat the learning procedures.

10. If you want to learn the other keys of the DVD player. Please refer to the above steps and operate according to the hints on the screen.

11. You can control the DVD player by using the remote control unit of the TV after learning the related keys.
Usage: Press the AV NET button to enter the **AV NET** mode. Press the ▲ ▼ cursor buttons to select **DVD2** and then refer to 【**Using the AV NET function**】 for more information.

Notes:

(1) The set can only learn and record remote codes of one of the external equipment. For example, you learn the codes of VCR2 after finishing learning the codes of DVD2, the set will record the codes of VCR2 only.

(2) Please select the learned items in order to clear their codes by pressing the CHⅠ/Ⅱ button to release the occupied internal memory's capacities. The outer frame of the reset items will return to white display.

(3) Due to the compatibilities of the equipment and the TV, sometimes the remote codes of some equipment cannot be learned by the TV. This is normal.

【External audio/video equipment type code】

1. DVD.....................................CODE

AMW.	0872
Afreey.	0698
Aiwa.	0641
Akai.	0770, 1089
Alba.	0717, 0539, 0672
Allegro.	0869
Amoisonic.	0764, 0835
Apex Digital.	0755, 0672, 0796, 1020, 1056
	1061, 0717, 0794, 0797, 1004
B & K.	0655, 0662
BBK.	0863
Big Echo.	1050
Blaupunkt.	0717
Blue Parade.	0571
Bubugao.	0863
Celestial.	1020
Centrex.	0672, 1004
Changhong.	0627, 1061
CineVision.	0869
Cirrus.	0700
Coby.	1086, 0778, 0852, 1107
Cydectin.	1074
DVD2000.	0521
Daewoo.	0833, 0869, 0705, 0770
Dansai.	0770
Daytek.	0872
Decca.	0770
Denon.	0634, 0490
Denver.	0778
DiViDo.	0705
Digitrex.	1056, 0672
Doublzne.	0490, 0634
Emerson.	0591, 0675
Enterprise.	0591
Fisher.	0670
Fun TV.	1055
Funai.	0675
GE.	0717, 0522
GPX.	0699
Go Video.	0741, 1075, 0744, 0833, 0869
GoldStar.	0741
Goodmans.	1004
Gradiente.	0651
Greenhill.	0717
Grundig.	0539, 0705
HiMAX.	0843
Hitachi.	0573, 0664
Hiteker.	0672
Idall.	1208
Initial.	0717
Integra.	0627
JVC.	0623, 0867, 0558
JWin.	1051, 1049
KLH.	0717, 1020, 1149
Kenuo.	1175
Kenwood.	0534, 0490
Konka.	0719, 0711, 0720, 0721, 1192
Koss.	0651
LG.	0869, 0591, 0741
Landel.	0826
Lasonic.	0798
Loewe.	0885
Magnavox.	0503, 0675
Malata.	0782
Marantz.	0539
MDS.	1111
Memorex.	0831
Microsoft.	0522
Minato.	0752
Mintek.	0717, 0839
Mirror.	0752
Mitsubishi.	0521
Momitsu.	1082
NAD.	0692
NEC.	0869
Nesa.	0717
Next Base.	0826
Nintaus.	0793, 1202
Nissho Iwai.	1055
Norcent.	0872, 0895, 1107

Olidata.	0672
Onkyo.	0627, 0503
Oritron.	0651
Palsonic.	0672, 0852
Panasonic.	0490, 1762, 0632
Panda.	1203
Philco.	0733
Philips.	0885, 0646, 0675, 0503, 0539
Pioneer.	0525, 0631, 0638, 0571, 0632
Polaroid.	1061, 1086
Polk Audio.	0539
Portland.	0770
ProVision.	0778
Proscan.	0522
Qisheng.	1206
Qwestar.	0651
RCA.	0522, 0571, 0717
Recco.	0698
Reoc.	0752
Revoy.	0699
Rio.	0869
Rotel.	0623
Rowa.	0823, 1004
SVA.	0860, 1105, 0672, 0717, 1209
Sampo.	0698, 0752
Samsung.	0820, 1075, 0490, 0573, 0744
Sanyo.	0670, 0873
Sast.	1201, 1207
Schwaiger.	0752
Semp.	0503
Sharp.	0630, 0752
Sherwood.	0633, 0770
Shinco.	0717
Shinsonic.	0533, 0839
Simaudio.	0885
Skyworth.	0766, 0898
Sonic Blue.	0869
Sony.	0533, 0864
Sungale.	1074
Superb.	0855
Sylvania.	0675
Symphonic.	0675
TCL.	1180, 1182, 1189
TYT.	0705
Tatung.	0770
Teac.	0717, 0571, 0692
Technics.	0490
Techwood.	0692
Theta Digital.	0571
Thomson.	0522
Toshiba.	0503
Tredex.	0800, 0799, 0803, 0804, 0843
Tsinghua Tongfang.	1204, 1205
US Logic.	0839
Universum.	0591
Urban Concepts.	0503
Wesder.	0699
Wintel.	1131
XBox.	0522
Yamada.	1004
Yamaha.	0490, 0539, 0545
Zenith.	0591, 0741, 0869, 0503

2. VCR.....................................CODE

ASA.	0081, 0037
Admiral.	0048, 0209
Adventura.	0000
Adyson.	0072
Aiko.	0278
Aiwa.	0000, 0209, 0037, 0307, 0479
Akai.	0053, 0041, 0315
Akiba.	0072
Akura.	0072
Alba.	0072, 0000, 0278, 0209, 0315
Allstar.	0081
America Action.	0278
American High.	0035
Amoisonic.	0479
Amstrad.	0000, 0072
Anam.	0162, 0226, 0240, 0037, 0278

Anam National.	0162, 0226
Anitech.	0072
Aristona.	0081
Asha.	0240
Asuka.	0037
Audiosonic.	0278
Audiovox.	0278, 0037
Baird.	0041, 0000
Basic Line.	0278, 0072
Beaumark.	0240
Bestar.	0278
Blaupunkt.	0162, 0081, 0226, 0227
Bondstec.	0072
Brandt.	0041
Brandt Electronic.	0041
Broksonic.	0209, 0184, 0479
Bush.	0072, 0315, 0209, 0278
CCE.	0072, 0278
CGE.	0000
Calix.	0037
Canon.	0035
Carena.	0209
Carrefour.	0045
Carver.	0081
Cathay.	0278
Changhong.	0048, 0081
Cimline.	0072
Cineral.	0278
Citizen.	0037, 0278
Colt.	0072
Condor.	0278
Craig.	0037, 0072, 0047, 0240
Crown.	0278, 0072
Curtis Mathes.	0035, 0041, 0060, 0162
Cybernex.	0051, 0240
Cyrus.	0081
Daewoo.	0278, 0046, 0045
Dansai.	0072, 0278
De Graaf.	0081, 0048, 0042, 0046
Decca.	0000, 0067, 0081, 0209
Denon.	0042
Diamant.	0037
Domland.	0209
Dual.	0041, 0081, 0278
Dumont.	0081, 0000
Durabrand.	0038, 0039
Dynatech.	0000
ESC.	0240, 0278
Elbe.	0038, 0278
Elcatech.	0072
Electrohome.	0037
Electrophonic.	0037
Elin.	0051, 0240
Elsay.	0072
Elta.	0072, 0278
Emerex.	0032
Emerson.	0184, 0043, 0278, 0000, 0035, 0037
	0045, 0072, 0209, 0240, 0479
Ferguson.	0041, 0000, 0053
Fidelity.	0000, 0072
Finlandia.	0081, 0000, 0048, 0042
Finlux.	0081, 0042, 0000
Firstline.	0072, 0209, 0043, 0037, 0045
Fisher.	0047, 0046
Flint.	0209
Fuji.	0033, 0035
Fujitsu.	0000, 0045, 0052
Funai.	0000, 0593
GE.	0035, 0060, 0226, 0240
GEC.	0081
Galaxis.	0278
Garrard.	0000
General.	0052, 0045
GoldHand.	0072
GoldStar.	0037, 0038, 0209, 0226
Goodmans.	0072, 0278, 0081, 0062, 0000, 0037
Gradiente.	0000
Graetz.	0041, 0240
Granada.	0081, 0000, 0048, 0240, 0037
	0042, 0046, 0226
Grandin.	0072, 0000, 0037, 0278

【External audio/video equipment type code】

Grundig.........................0081, 0226, 0072
HCM................................0072
HI-Q..............................0047
Hanseatic.....................0037, 0209
Haojie...........................0240
Harley Davidson...............0000
Harman/Kardon..............0038, 0081
Harwood.........................0072
Headquarter....................0046
Hinari................0072, 0041, 0240, 0278
Hischito.........................0045
Hitachi.....0042, 0240, 0000, 0081, 0037, 0041, 0089
Hornyphone......................0081
Hughes Network Systems...........0042
Hypson.....................0072, 0278, 0209
ITT.....................0041, 0046, 0240
ITV.........................0037, 0278
Imperial.........................0000
Ingersol....................0209, 0240
Inno Hit....................0072, 0240
Interfunk........................0081
Intervision............0278, 0000, 0037, 0209
Irradio....................0072, 0081
JVC.....................0067, 0041, 0045
Jensen..........................0041
KEC.........................0037, 0278
KLH...............................0072
Kaisui...........................0072
Kendo......................0209, 0315, 0072
Kenwood............0041, 0067, 0038, 0046
Kimari...........................0047
Kodak......................0035, 0037
Kolin......................0041, 0043
Korpel...........................0072
Kuba Electronic..................0047
Kyoto............................0072
LG.........0037, 0038, 0042, 0045, 0051, 0053, 0209
LXI..............................0037
Lenco............................0278
Leyco............................0072
Lloyd's..........................0000
Loewe...................0081, 0037, 0162
Logik......................0240, 0209, 0072
Luxor..........0046, 0043, 0062, 0047, 0048, 0072
M Electronic...............0037, 0000, 0038
MEI..............................0035
MGA........................0043, 0240
MGN Technology...................0240
MTC........................0000, 0240
Magnasonic.......................0593
Magnavox.........0035, 0593, 0000, 0039, 0081
Magnin...........................0240
Manesth...............0072, 0045, 0081, 0209
Marantz................0062, 0209, 0035, 0081
Marta............................0037
Matsui.....................0209, 0240, 0000
Matsushita.............0227, 0035, 0162, 0226
Memorex.........0046, 0047, 0479, 0035, 0240, 0307
...............0000, 0037, 0039, 0048, 0162, 0209
Memphis..........................0072
Metronic.........................0081
Metz...................0037, 0081, 0162, 0227
Minolta..........................0042
Mitsubishi.............0043, 0081, 0041, 0067
Motorola...................0035, 0048
Multitech..................0000, 0072
Murphy...........................0000
Myryad...........................0081
NAD..............................0058
NAP..............................0039
NEC...........0038, 0035, 0037, 0041, 0048, 0067
National.........................0226
Neckermann.......................0081
Nesco............................0072
Newave...........................0037
Nikkai.....................0072, 0278
Nikko............................0037
Noblex...........................0240
Nokia..............0041, 0048, 0278, 0240, 0046
Nordmende........................0041
Oceanic............0048, 0081, 0000, 0041, 0046

Okano......................0072, 0315
Olympus....................0035, 0226
Optimus.........0162, 0058, 0593, 0037, 0048
Optonica.........................0062
Orion......................0209, 0184, 0479
Osaki......................0072, 0000, 0037
Otake............................0209
Otto Versand.....................0081
Palladium........0209, 0041, 0072, 0037, 0240
Panasonic..............0226, 0162, 0227, 0035
Pathe Cinema.....................0043
Pathe Marconi....................0041
Penney.............0035, 0042, 0240, 0037, 0038
Pentax...........................0042
Perdio.....................0000, 0209
Philco......0038, 0479, 0000, 0035, 0072, 0209, 0226
Philips.........0062, 0593, 0000, 0035, 0081, 0226
Phonola..........................0081
Pilot............................0037
Pioneer.............0081, 0058, 0042, 0067
Polk Audio.......................0081
Portland.........................0278
Precision........................0058
ProVision........................0278
Profitronic................0240, 0081
Proline..........................0000
Proscan..........................0060
Prosonic.........................0278
Protec...........................0046
Pulsar.....................0039, 0051
Pye..............................0081
Qisheng..........................0060
Quarter..........................0046
Quartz...........................0046
Quasar.....................0035, 0162, 0278
Quelle...........................0081
RCA.........0058, 0000, 0035, 0042, 0060, 0226, 0240
RFT..............................0072
Radialva...................0037, 0048
RadioShack.......................0000
Radiola..........................0081
Radix............................0037
Randex...........................0037
Realistic...0047, 0037, 0000, 0035, 0046, 0048, 0062
Rex..............................0041
Roadstar...........0037, 0072, 0240, 0278
Runco............................0039
SBR..............................0081
SEG........................0072, 0278, 0240
SEI..............................0081
STS..............................0042
Saba.............................0041
Saisho...........................0209
Salora.....................0046, 0043
Sampo......................0037, 0048
Samsung...........0240, 0045, 0051, 0053
Sanky......................0039, 0048
Sansui.............0041, 0067, 0000, 0209, 0479
Sanyo..............0046, 0047, 0048, 0159, 0240
Sast.............................1116
Saville....................0240, 0278
Schaub Lorenz..............0000, 0041
Schneider...0081, 0000, 0037, 0042, 0278, 0072, 0240
Scott......................0184, 0043, 0045
Sears..........0042, 0046, 0037, 0000, 0035, 0047
Seleco.....................0041, 0037
Semp.............................0045
Sentra...........................0072
Sharp......................0048, 0062, 0209
Shinco...........................0000
Shintom..........................0072
Shivaki..........................0037
Shogun.....................0051, 0240
Siemens....................0081, 0037
Siera............................0081
Silva............................0278
Singer.....................0045, 0072
Sinudyne...................0081, 0209
Sonneclair.......................0072
Sonolor....................0046, 0062
Sontec.....................0037, 0278

Sony.................0032, 0033, 0000, 0035
Soundwave..................0209, 0037
Ssangyong........................0072
Stern............................0278
Sunkai...........................0209
Sunstar..........................0000
Suntronic........................0000
Sunwood..........................0072
Supra............................0037
Sylvania...........0000, 0035, 0593, 0043, 0081
Symphonic..................0000, 0593
TMK..............................0240
Taisho...........................0209
Tandberg.........................0278
Tandy............................0000
Tashiko............0000, 0240, 0081, 0048, 0037
Tatung.............0000, 0081, 0048, 0043, 0053
...................0041, 0045, 0067, 0209
Teac...............0000, 0593, 0041, 0307, 0278
Tec........................0072, 0278
Tech Line........................0072
Technics...................0035, 0162, 0226
Teco...............0035, 0037, 0038, 0041, 0048
Teknika............0000, 0035, 0037, 0052
Teleavia.........................0041
Telefunken.......................0041
Teletech.........................0072
Tenosal..........................0072
Tensai.....................0072, 0000
Thomas...........................0000
Thomson............0041, 0067, 0278, 0060
Thorn......................0037, 0041
Tokai............................0072
Toshiba............0045, 0081, 0043, 0041, 0067
Totevision.................0037, 0240
Uher.............................0240
Ultravox.........................0278
Unitech..........................0240
Universum..........0081, 0000, 0037, 0240
Vector...........................0045
Vector Research..................0038
Victor.....................0067, 0041
Video Concepts...................0045
Videomagic.......................0037
Videosonic.......................0240
Villain..........................0000
Wards..............0060, 0000, 0047, 0048, 0240
...................0035, 0042, 0062, 0072, 0081
Watson...........................0081
Wharfedale.......................0593
White Westinghouse.........0072, 0209
XR-1000....................0000, 0035, 0072
Yamaha.....................0038, 0041
Yamishi....................0072, 0278
Yokan............................0072
Yoko.............................0240
Zenith.............0033, 0039, 0479, 0000, 0209

3. AVR.	CODE

(1) Amplifer
Acurus...........................1431
Bose.............................0674
Classe...........................1461
Classic..........................1595
Denon......................0272, 0522
Epoch............................1431
Eroica...........................0579
JVC..............................0331
Korsun...........................1483
Luxman...........................0165
Marantz..........................0321
Mark Levinson....................1483
NEC........................0116, 0131, 0264
Nakamichi........................0321
PS Audio.........................1523
Sansui.....................0321, 0652
Sharp............................0226
Shure............................0264
Sony.......................0220, 0689
TCL..............................1591

【External audio/video equipment type code】

Temei Sheng.....1603
Toshiba.....0353
Victor.....0331
Yamaha.....0143, 0354

(2) AV Receiver
ADC.....0531
AVLight.....0158
Aiwa.....1388, 1641, 0121, 0158, 1405
Akai.....0115
Alco.....1390
Anam.....0112, 0281, 1074, 1609
Apex Digital.....1257, 1430
Audiolab.....1189
Audiotronic.....1189
Audiovox.....1390
Bose.....1229
Capetronic.....0531
Carver.....1189
Centrex.....1257
Classic.....1352
Coby.....1263, 1389
Daewoo.....1250
Denon.....1360
Ferguson.....0531
Fine Arts.....1189
Fisher.....1801
Fonmix.....1360
GTX.....0112
Garrard.....0281
Glory Horse.....1263
GoldStar.....0281, 0112
Grundig.....1189, 0281
Harman/Kardon.....0110
Hitachi.....1801
Initial.....1426
Inkel.....0027
Integra.....0135, 1298
JBL.....0281, 0110
JVC.....1374, 1282, 0074, 0531, 1263
KLH.....1390, 1412, 1428
Kenwood.....0027, 0186, 1313, 1569, 1570
Koss.....1366
LG.....1293
Lasonic.....1798
Liquid Video.....1497
M Electronic.....0112
MCS.....0039
Magnavox.....1269, 0531, 1189
Marantz.....0039, 1189, 1269, 1289
Micromega.....1189
Myryad.....1189
Norcent.....1389
Onkyo.....0135, 1298, 0842
Optimus.....1023, 0531, 1074, 0670
Oritron.....1366, 1497
Panasonic...1548, 1288, 1316, 1763, 1764, 0039, 1518
Philco.....1390
Philips.....1266, 1189, 1269, 1289
Pioneer.........1384, 0150, 0531, 0630, 1023, 1184
Polk Audio.....1289
Qisheng.....1390, 1609
Quasar.....0039
RCA.....1390, 1609, 0531, 1074, 1023
RadioShack.....1263
Saba.....0531
Samsung.....0112, 1295, 1581, 1500
Sanyo.....1469, 1801
Schneider.....0531
Shangling.....1608
Sharp.....0186
Sharper Image.....1263
Shinco.....1390
Shinsonic.....1426
Silsonic.....0176, 1426
Sonic.....0281
Sony.....1658, 0158, 1558, 1058, 1258, 1441
.....1758, 1759
Soundesign.....0670
Stereophonics.....1023
Sunfire.....1313

Teac.....0112, 1390, 1528, 1074
Technics.....0039, 1308, 1518
Techwood.....0281
Telefunken.....0531
Thorens.....1189
Uher.....0531
Universum.....0281, 0112, 1609
Venturer.....1390
Victor.....0074
Wards.....0158
Yamaha.....0176, 0186, 1331, 1176
Yukai.....1352
Zenith.....1293, 0281

4. CD.....CODE
ADC.....0018
Acoustic Research.....0420
Aiwa.....0124, 0157
Akai.....0156
Alto.....0625
Anam.....0362
Arcam.....0157
Ariston.....0625
Audio Research.....0157
AudioTon.....0157
Audiolab.....0157
Audiomeca.....0157
Burmester.....0420
CCE.....0157
CDC.....0420
Cairn.....0157
California Audio Labs.....0029, 0303
Cambridge Audio.....0625
Carver.....0157, 0179
Classic.....1297
Copland.....0393
Cyrus.....0157
DKK.....0000
DMX Electronics.....0157
Denon.....0003, 0873
Dual.....0196
Dynamic Bass.....0179
Eclipse.....0625
Elektra.....0393
Fisher.....0179
GTX.....0362
Garrard.....0393, 0420
Gemini.....0625
Genexxa.....0032
GoldStar.....0383
Goodmans.....0362, 0625
Grundig.....0157
HCM.....0625
Harman/Kardon.....0157
Hiro.....0625
Hitachi.....0032
Inkel.....0114, 0196, 0203, 0065, 0180
Integra.....0101
JVC.....0072
KLH.....1372
Kenwood.....0028, 0036, 0037, 0190, 0626, 0681, 0826
Korsun.....1484
Krell.....0157
Kyocera.....0018
LG.....1208
Linn.....0157
MCS.....0029
MTC.....0420, 0625
Magnavox.....0157
Marantz.....0157, 0029, 0180, 0626
Mark Levinson.....1484
Matsui.....0157
Memorex.....0180
Meridian.....0157
Micromega.....0157
Miro.....0000
Mission.....0157
Mitsubishi.....0156
Myryad.....0157
NAD.....0000, 1208

NSM.....0157
Nagaoka.....0018
Naim.....0157
Nikko.....0362, 0625
Onkyo.....0101, 0381, 0868
Optimus.....0468, 0420, 1063, 0000, 0032
.....0037, 0179, 0196
Panasonic.....0029, 0303
Parasound.....0420
Philips.....0157, 0626
Pink Triangle.....0625
Pioneer.....0032, 1087, 0468, 1062, 1063
Polk Audio.....0157
Proton.....0157
QED.....0157
Quad.....0157
Quasar.....0029
RCA.....0032, 1062, 0468, 0420, 0179
Radiotone.....0625
Realistic.....0179, 0180, 0420
Revox.....0157
Rotel.....0157, 0420
Royal.....0420
SAE.....0157
STS.....0018
Samsung.....0602
Sansui.....0202, 0157, 0625
Sanyo.....0179, 0349
Sast.....0157
Sharp.....0037, 0180, 0261, 0861
Sherwood.....0065, 0114, 0180, 0196
Shinco.....1372
Siemens.....0362
Silsonic.....0036, 0888
Simaudio.....0157
Sonic Frontiers.....0157
Sony.....0000, 0490, 1364
SuperTech.....0625
Synergy.....0625
TAG McLaren.....0157
TCL.....0383
TDK.....1208
Tandberg.....0203
Tandy.....0032
Tascam.....0420
Teac.....0362, 0625, 0180, 0393, 0420
Technics.....0029, 0207, 0303
Techwood.....0362
Thorens.....0157
Toshiba.....0481
Universum.....0157, 0362
Victor.....0072
Wards.....0157
YBA.....0625
Yamaha.....0187, 0036, 0261, 0888, 1292
Zonda.....0157

5. CBL.....CODE
ABC.....0003, 0008, 0011, 0014, 0033, 0047
Ajinvision.....1271
Archer.....0797
Bell & Howell.....0014
Bestlink.....0303
British Telecom.....0003
ClearMax.....0883
Clearmaster.....0883
Comtronics.....0040
Coolmax.....0883
Coship.....1462
Daehan.....0778
Daeryung.....0008, 0877, 1877
Digi.....0637
Director.....0476
Dumont.....0637
Electricord.....0078
Emerson.....0797
Everquest.....0040
Funai.....0248
GHZ.....0078
GMI.....0797

AV NET

【External audio/video equipment type code】

GNI......................................1466
Galaxi...................................0008
Gehua....................................0476
Gemini...................................0797
General Instrument.........0003, 0011, 0014, 0476
GoldStar......................0040, 0144, 0838
Goodmind.................................0797
Hitachi...................0011, 0014, 0033, 0255
Hwalin...................................0303
IEEC.....................................1018
Jerrold..............0003, 0011, 0014, 0047, 0476
Jiuzhou..................................1445
Koka.....................................0255
LG.......................0040, 0144, 0779, 0838
MS.................................0303, 1018
Macom....................................0033
Motorola...........................0476, 1254
Movie Time...............................0078
Now......................................0776
Oak................................0248, 0303
PVP Stereo Visual Matrix.................0003
Pace...............................0237, 1877
Pacific..................................1410
Panasonic..........................0008, 0040
Panther..................................0637
Philips....................0255, 0305, 0317
Pioneer...........1021, 1877, 0144, 0533, 0877
RadioShack.................0883, 0303, 0797
Rampage..................................0255
Rembrandt................................0011
SL Marx..................................0040
Samsung................0702, 0040, 0144, 0840
Sast.....................................1091
Scientific Atlanta.........0008, 0877, 1877
Seawoo.............................0073, 0780
Shida....................................0777
Signal...................................0040
Signature................................0011
Skyworth.................................1464
Sony.....................................1006
Starcom...................0003, 0014, 0047
Stargate...........................0040, 0797
Storm....................................1018
Supermax.................................0883
TCL......................................1445
TS....................0003, 0255, 0303, 1018
Tadiran..................................0040
Tae Kwang................................0068
Taepyung.................................1410
Taihan...................................0778
Teac.....................................1018
Teleview.................................0040
Thunderstone.............................1355
Timeless.................................0040
TongKook...........................0777, 0840
TopStone.................................1355
TopTV....................................1465
Torx.....................................0003
Trans PX.................................0303
Tristar..................................0883
UBS......................................0073
United Cable.............................0003
Universal................................0078
V2.......................................0883
ViewMaster...............................0883
Vision...................................0883
Visionetics..............................1374
Vortex View..............................0883
Wiso.....................................0078
Zenith...................................0525

Crossdigital.............................1109
Cyrus....................................0200
D-box........................0723, 0873, 1127
DNT......................................0200
DirecTV.............0247, 1109, 0099, 0639, 0819
Echostar.................................0853
Elta.....................................0200
Gold Box.................................0853
Gradiente................................0856
Hitachi............................0819, 1250
Humax..............................1406, 1407
Innova...................................0099
Jiuzhou..................................1450
Kathrein.................................0200
LG.......................................1226
MDS................................1391, 1401
MMBN.....................................1391
Marantz..................................0200
MediaSat.................................0853
Mega.....................................0200
Morgan's.................................0200
Myryad...................................0200
NEC......................................1270
Netsat...................................0099
Nikko....................................0200
Nokia..............0873, 1023, 0751, 0723, 1127
Pace.....................................0200
Panasonic..........................0247, 1404
Philips...........0200, 0853, 0099, 0856, 1114
Pioneer..................................0853
QNS................1367, 1402, 1404
RFT......................................0200
Radiola..................................0200
SKY................................0099, 0856
SVA......................................1455
Sagem..............................0820, 1114
Samsung............................1109, 1276
Skymax...................................0200
Sony.....................................0639
TCL......................................1143
TPS......................................0820
Thomson..................................0853
Unisat...................................0200
Ventana..................................0200
Zenith...................................0856
Zeta Technology..........................0200

6. STB.................................CODE
ADB......................................1367
Akai.....................................0200
Allsat...................................0200
Asat.....................................0200
Canal Digital............................0853
Canal Satellite..........................0853
Canal+...................................0853
Century..................................0856

TELETEXT

Name of buttons	Operation
TV/TEXT	Switches between TV mode and TELETEXT mode.
INDEX	Selects the index page.
SUB	Allows receiving of a sub page. The sub page number and the color key will be displayed.
RED（POSITION） GREEN（SWAP） YELLOW（A/B） BLUE（MULTI PIC.）	Each of these buttons select a link page displayed on the lower part of the screen.
U.N.L	Changes the screen display mode through the following. •upper half screen enlarged •lower half screen enlarged •normal state
HOLD	Holds the page currently being displayed on the screen. Instead of the number, 'HOLD' indicator appears on the top left of the screen. Press this button again to release the hold state.
REVEAL	Allows hidden information (found on some teletext pages) to be displayed on the screen.
PAGE ▲ / ▼	Increase/ decrease the page number.
CANCEL	This button is used to return the screen to the TV mode temporarily while the TV is searching a required text page. Press this button again to display the teletext screen.
MODE	This button is used to switch between FASTEXT and LIST mode. FASTEXT is to link the four 'prompt' information on the lower part of the screen, represented by the four colors which match the color buttons on the remote control.

TO ADJUST THE TELETEXT CONTRAST

While in TELETEXT mode, press the MENU button to display the menu as shown on page 16, and press the ▲ ▼ cursor buttons to select the **Picture** option, then press the ENTER button to display the **Picture** menu as shown on the right.

Press the ▲ ▼ cursor buttons to select the **Contrast** option, then press ◄ ► cursor buttons to adjust the contrast as shown on the right.

In TELETEXT mode, the TV will exit from this mode when it enters the **Audio**, **Timer** or **Function** menu.

```
Picture          ▼
  ◑ Contrast          +60 ▬▬▬▬
  Reset
  ⊖ Select   ENTER  Return
```

```
  ◑ Contrast     ►   +60 ▬▬▬▬
  ◑ Set    RETURN Return
```
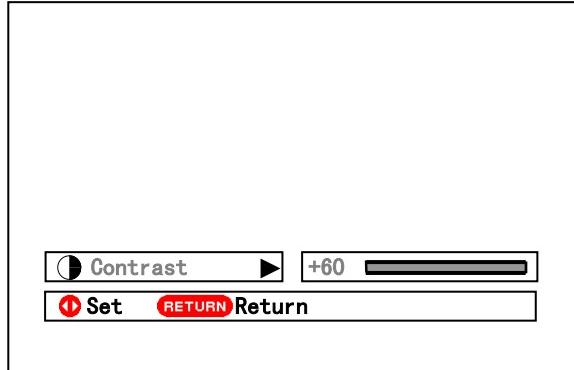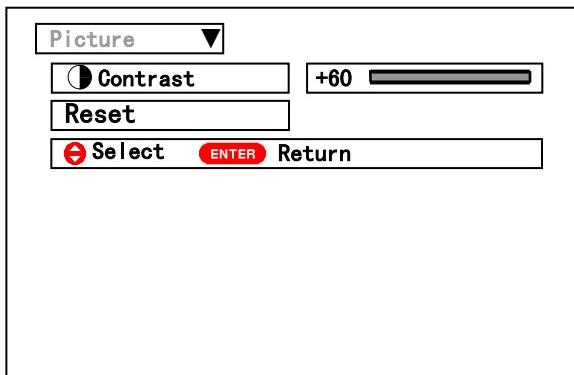
ASPECT MODE

You may set different aspect modes to view the image with different signal formats.

【TV P.Size】

This function is available for conventional TV broadcast (RF) signal input. When other non RF signals are received, this function is not available and the size of the picture may not vary though **TV P.Size** can be set. This is normal.

1. When conventional TV broadcast (RF) signal is received
Follow the steps on page 20, 21 to enter the menu, then access the **Function** menu and select the **TV P.Size**. Press the ◄ ► cursor buttons to change between three different modes including **16:9**, **4:3** and **Expanded**.
● If the P.SIZE button is pressed, the aspect modes will switch between six different modes, 《**16:9**》, 《**16:9Zoom**》, 《**4:3**》, 《**Expanded**》, 《**4:3Zoom1**》 and 《**4:3Zoom2**》.
● When you press the P.SIZE button, the aspect mode will change to 《**16:9**》, 《**16:9Zoom**》, 《**4:3**》, 《**Expanded**》, 《**4:3Zoom1**》 or 《**4:3Zoom2**》 mode. However, if you change program No. or power on the TV, the aspect mode will automatically return to the mode that you set in **TV P.Size** option.

2. When video, s.video or non HD component signal is received
Press the P.SIZE button to switch between six different modes, 《**16:9**》, 《**16:9Zoom**》, 《**4:3**》, 《**Expanded**》, 《**4:3Zoom1**》 and 《**4:3Zoom2**》.

Please see the following on each of six modes for details.

		Signal sources			
		For example: Conventional TV broadcast format	For example: widescreen cinema	For example: signal transformed from HD	For example: signal transformed from HD
Suggested aspect mode	《16：9》	image		image	image
	《16：9Zoom》				image
	《4：3》	image			
	《Expanded》	image			
	《4：3Zoom1》		image		
	《4：3Zoom2》		image		

ASPECT MODE

●To switch aspect mode, please press the P.SIZE button, the TV will display the corresponding aspect mode momentarily at the lower part of the screen. For example, set the current aspect mode to 《16:9》 as shown at the lower left side. If 《16:9 Zoom》 is set as shown at the lower right side, you can press the ▲ ▼ cursor buttons to adjust the display position up and down before the words " 《16 : 9Zoom +3》 ↔ Scroll" disappear as shown at the lower right side. Likewise, the function is available in 《4:3Zoom1》, 《4:3Zoom2》 or 《Expanded》 mode.

《16 : 9》

《16 : 9Zoom +3》 ↔ Scroll
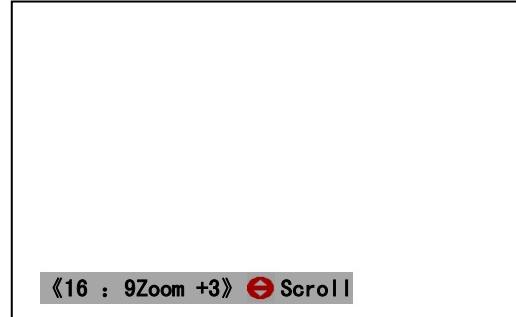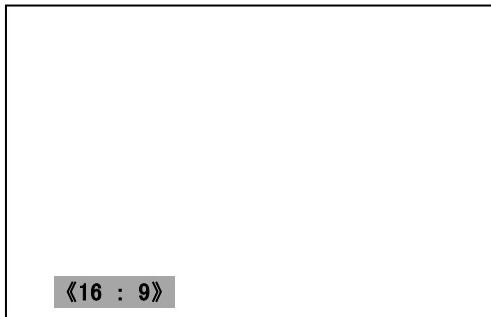
●If you change program No. or power on the TV, the aspect mode will not change.

3. When HD component signal is received
●Press the P.SIZE button to switch between three different modes, 《16:9》, 《Expanded》 and 《16:9Zoom》.
●If you change program No. or power on the TV, the aspect mode will return to the mode of 《16:9》.

Please see the following on each of three modes for details.

		Signal Sources		
		HD Signal	HD Signal	HD Signal
Suggested aspect mode	《16 : 9》			
	《Expanded》			
	《16 : 9Zoom》			

ASPECT MODE

【Auto P.Size】

The **Auto P.Size** is designed for HDMI input.

Follow the steps on page 20, 21 to enter the menu, then access the **Function** menu and select the **Auto P.Size** option. Press the ◄ ► cursor buttons to change between **On** and **Off**.

1. With the signals such as 576i, 576p, 480i and 480p from the HDMI input of **INPUT1**

●Set the **Auto P.Size** option to **Off**

To press the P.SIZE button, the aspect mode will switch between six different modes, 《16:9》, 《16:9Zoom》, 《4:3》, 《Expanded》, 《4:3Zoom1》 and 《4:3Zoom2》. If you change program No. or power on the TV, the aspect mode will not change.

●Set the **Auto P.Size** option to **On**

To press the P.SIZE button, the aspect mode will switch between six different modes, 《16:9》, 《16:9Zoom》, 《4:3》, 《Expanded》, 《4:3Zoom1》 and 《4:3Zoom2》.

There are three cases as shown below.

1)The aspect ratio of HDMI signal is **4:3**

If you change program No. or power on the TV, the aspect mode of the TV will not change.

2)The aspect ratio of HDMI signal is **LETTER**

If you change program No. or power on the TV, the aspect mode of the TV will automatically return to the mode of 《4:3Zoom1》.

3)The aspect ratio of HDMI signal is **16:9**

If you change program No. or power on the TV, the aspect mode of the TV will automatically return to the mode of 《16:9》.

2. With the signals such as 1080i and 720p from the HDMI input of **INPUT1**

To press the P.SIZE button, the aspect mode will switch between three different modes, 《16:9》, 《16:9Zoom》 and 《Expanded》. If you change program No. or power on the TV, the aspect mode of the TV will return to the mode of 《16:9》.

Notes：

1．In multi picture, pressing the P.SIZE button does not function.
2．Do not watch TV at non full screen, as this may cause damage to your PRT.
3．Using this special function (aspect mode) to change the size of image displayed (i.e., change the ratio of height and width) for the purpose of public release or some commercial interests may infringe the copyright law.

OTHER FUNCTIONS

AV NET button

Press the $\boxed{\textbf{AV NET}}$ button to turn **AV NET** menu on or off.

Refer to page 42-52.

AUDIO button

Press the $\boxed{\textbf{AUDIO}}$ button to switch the sound mode
as shown below:

Theater→Music→Narration→Favorite

PICTURE button

Press the $\boxed{\textbf{PICTURE}}$ button to switch the picture mode
as shown below:

Dynamic→Natural→Theater→Favorite

DVD buttons

With this remote control unit, you can use it to operate
the selected brands of DVD players by pressing the
following buttons on this remote control unit simultaneously.

Example
To operate HITACHI DVD player, press and hold the
$\boxed{\textbf{RECALL}}$ button, followed by the ① button.

| Brands of DVD Player	Press
HITACHI	$\boxed{\textbf{RECALL}}$, ①
PIONEER	$\boxed{\textbf{RECALL}}$, ②
PANASONIC	$\boxed{\textbf{RECALL}}$, ③
TOSHIBA	$\boxed{\textbf{RECALL}}$, ④
PHILIPS	$\boxed{\textbf{RECALL}}$, ⑤
JVC	$\boxed{\textbf{RECALL}}$, ⑥
SAMSUNG	$\boxed{\textbf{RECALL}}$, ⑦
SONY	$\boxed{\textbf{RECALL}}$, ⑧
RCA	$\boxed{\textbf{RECALL}}$, ⑨
MITSUBISHI	$\boxed{\textbf{RECALL}}$, ⓪
ONKYO	$\boxed{\textbf{RECALL}}$, $\boxed{\textbf{INDEX}}$
ZENITH	$\boxed{\textbf{RECALL}}$, $\boxed{\textbf{MODE}}$
ORITRON	$\boxed{\textbf{RECALL}}$, $\boxed{\textbf{SUB}}$
SKYWORTH	$\boxed{\textbf{RECALL}}$, $\boxed{\textbf{REVEAL}}$
BBK	$\boxed{\textbf{RECALL}}$, $\boxed{\textbf{TV/TEXT}}$
SHINCO	$\boxed{\textbf{RECALL}}$, $\boxed{\textbf{CANCEL}}$
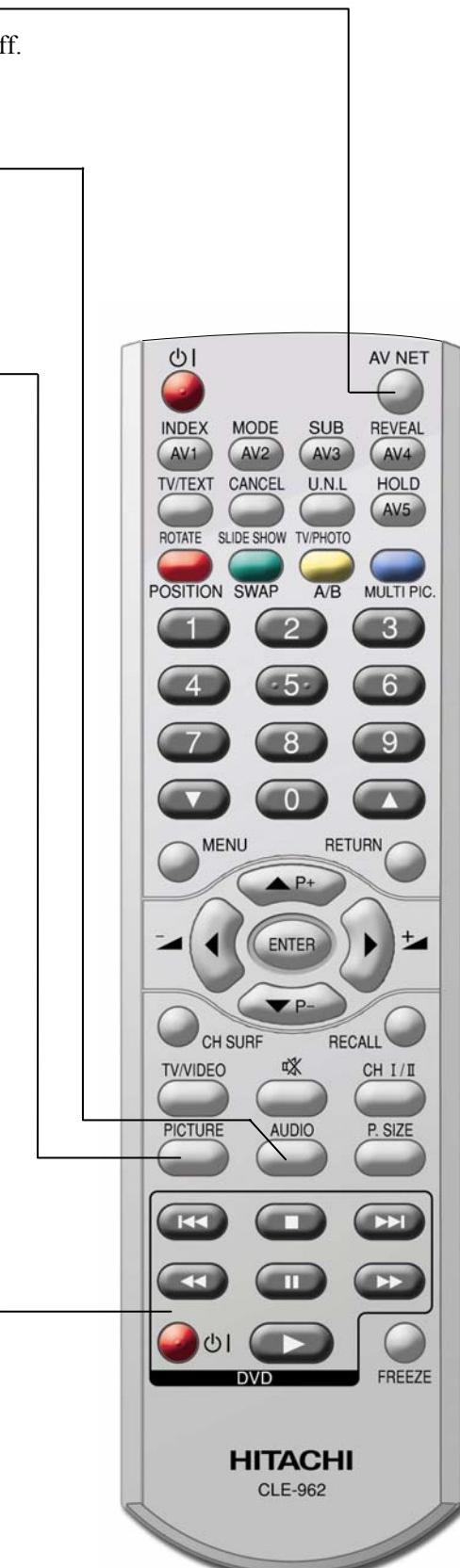
Note：Not all models of the listed brands can be operated using this remote control unit.

57

OTHER FUNCTIONS

TV/VIDEO button

Press the TV/VIDEO button to select the input mode.

```
        4   →   AV1
                 ↓
        PC       AV2
        ↑         ↓
        AV5      AV3
        ↑         ↓
              ←  AV4
```
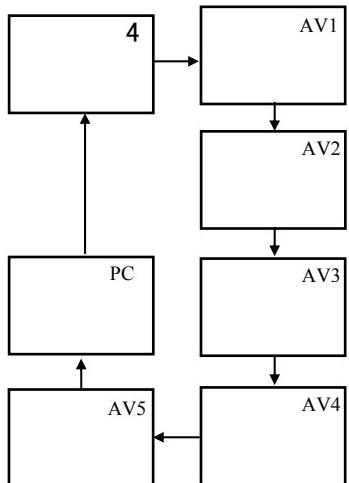
RECALL button

Press the RECALL button to display the program No. or AV No. and the related information.

Pressing the RECALL button again, the display will disappear.

①When receiving in the TV mode:

A few seconds later   A few seconds later

```
   08
  495MHz       →      08      →
   ◯◯
```
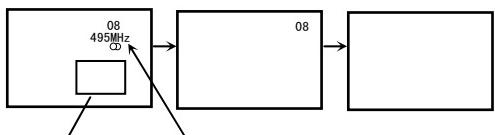
```
Picture:Favorite
Audio  :Favorite
Scan   :100Hz
P.Size :4:3
```

AUDIO MODE
◯◯ STEREO
▽ MONO
I MAIN
II SUB

②When receiving in the AV mode:

A few seconds later   A few seconds later

```
   AV1     →    AV1    →
```
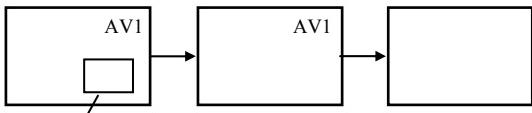
```
Picture:Favorite
Audio  :Favorite
Scan   :100Hz
P.Size :4:3
```

AV DIRECT SELECTOR buttons

Press the AV1～AV5 buttons to select one of them directly.

MUTE button

The sound is muted by pressing the 🔇 button. To release the muting, press the 🔇 button again or press the **Volume up** button.
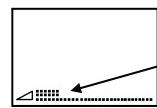
Muting is indicated in purple.

CH I/II button

Mode will exchange among I (MAIN), II(SUB) and FM(MONO) when bilingual broadcast is being received.

```
  → NICAM[I] → NICAM[II] ─┐
  └────────── ▽ ←─────────┘
```
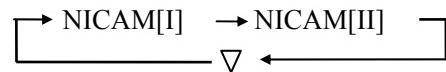
When stereo broadcast is being received, mode will exchange between STEREO and MONO.

```
  → NICAM ◯◯ → ▽ ─┐
  └────────────────┘
```
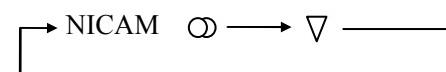
When A2 stereo broadcast is being received, mode will exchange between STEREO and MONO.

```
  → ◯◯ → ▽ ─┐
  └──────────┘
```
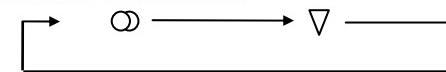
P.SIZE button

Press the P.SIZE button to switch the aspect mode. Refer to page54-56.

③When receiving in the PC mode:

A few seconds later   A few seconds later

```
   PC      →     PC     →
```
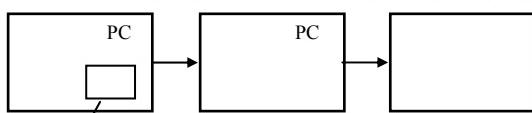
```
Audio  :Favorite
Format :VGA
```

OTHER FUNCTIONS

HD SIGNAL THROUGH MODE

This TV incorporates a **HD** signal through mode to display more actual **HD** picture. When receiving **HD** signal, you can switch between the **HD** signal through and **HD** signal non-through modes to obtain optimum picture.

To access **HD** signal through mode, please follow the following procedures:

1.Input **HD** signal to component terminals（Y, P_B/C_B, P_R/C_R）of **INPUT1** (or HDMI **INPUT1**) or **INPUT2**.

  Note:HD signal through mode is only for 1080i/50Hz and 1080i/60Hz. It is not available for other **HD** signal formats (for example:720p/60Hz).

2.Set the **Dynamic Contrast** and **Color Manager** in the **Picture** menu to **Off,** and set the **Scan Mode** in the **Function** menu to **HD**.

  Note: If you set the **Dynamic Contrast** or **Color Manager** to **On**, or you do not set **Scan Mode** to **HD**, it will exit from **HD** signal through mode.

3.Set the aspect mode to 《**16:9**》 by pressing the P.SIZE button.

  Note: When the aspect mode is set to 《**Expanded**》 or 《**16:9 Zoom**》 , it will exit **HD** signal through mode.

Notes：
1. When **HD** signal through and non-through mode are swapping, the picture will become black instantly. This is normal.
2. In this mode, the multi pictures displayed will be in non-through mode when using **Multi Picture** function. Exit from **Multi Picture** mode, the TV will return to **HD** signal through mode.

CONNECTION WITH OTHER EQUIPMENT

Jacks and connections of side panel

The side panel jacks are provided to allow you to conveniently connect a camcorder, VCR, PC, etc.

【**The typical connection of video camera, VCR, etc.**】

Side panel jacks

or
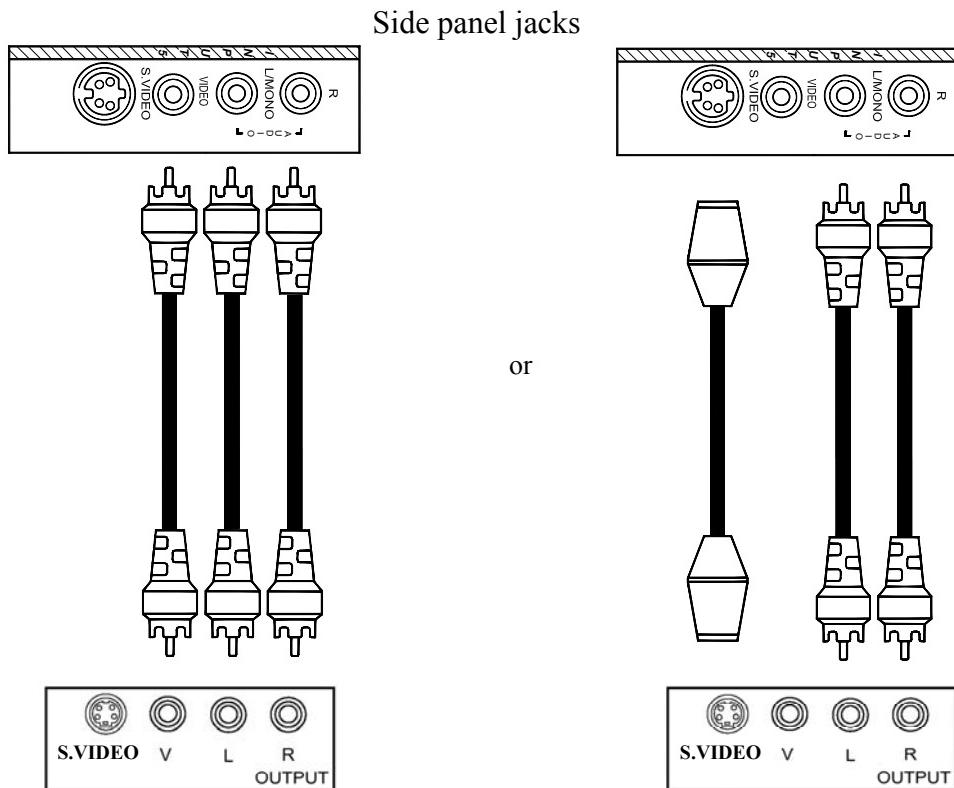
（**Outputs from VCR, DVD, S-VHS video camera, etc**）
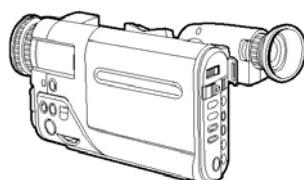
Notes：

1. Insert connection cord plugs completely when connecting to side panel jacks, and ensure that they are properly connected. S.VIDEO and VIDEO input jacks at the side panel cannot be used at the same time, or else, the playback picture may be abnormal. Thus, before you connect the cable to S.VIDEO jack, please check that VIDEO jack is not connected, and vice versa.

2. If your equipment has S.VIDEO output，please use S.VIDEO cable instead of the standard video cable.

3. If your equipment has a mono sound output, please insert the audio cable into the left audio (L/MONO) jack of your TV.

CONNECTION WITH OTHER EQUIPMENT

【**The typical connection of PC input**】
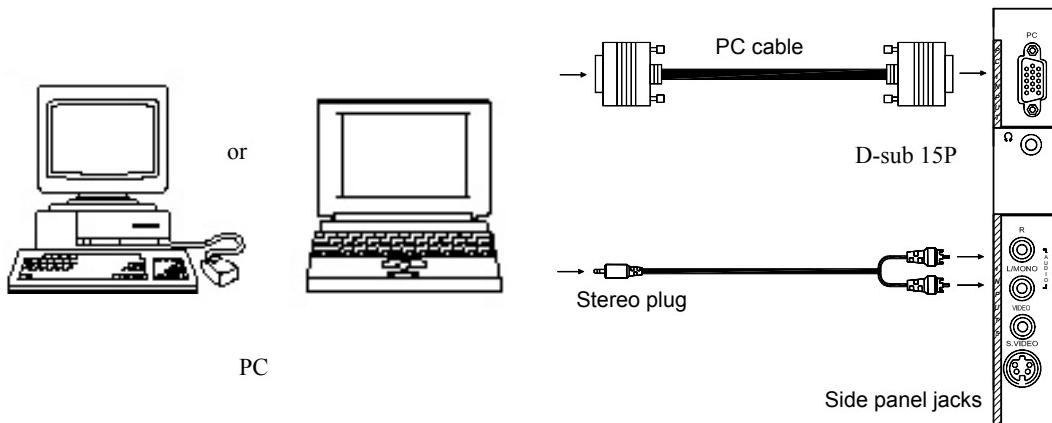
Explanations：

1．This TV supports PC with the specification of VESA 640×480@60Hz, VESA 800×600@60Hz or VESA 1024×768@60Hz.

2．Please connect the PC cable as shown above. Turn on the TV (and press the TV/VIDEO button to switch the TV to PC mode), follow by the PC. Some types of PC will be set to one of modes as mentioned above automatically. If your PC cannot be set automatically, please set it manually. When disconnecting, please turn off the PC power, then turn off the TV power switch and take off the PC cable.

3．In some cases, the PC maybe cannot display with the TV together.

4．The PC input terminal does not supply the audio signal. Please connect the audio output jack of PC to audio input jacks of **INPUT5**.

5．Some PC cannot connect with this TV.

6．This TV is not a professional monitor, so you may find some differences on the display of the TV when compared with the monitor.

7．This TV is not supplied with other equipment and cable as shown above.

8．The TV will exit PC mode automatically when entering the **Timer**, **Function** or **Setup** menu.

9．In PC mode, press the P.SIZE button to display as shown on the right, you can press the ▲ ▼ ◄ ► cursor buttons to adjust the display position up, down, left or right.

Note:

Avoid displaying still images on TV screen for a long time, otherwise, the still images can cause permanently ingrained on the PRT.
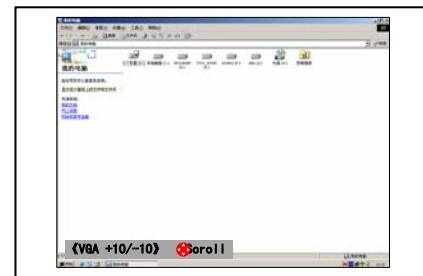
PC INPUT pin layout
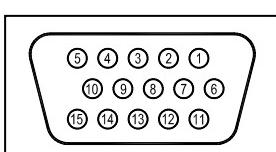
Pin	Name	Pin	Name	Pin	Name
（1）	R	（6）	GND	（11）	NC
（2）	G	（7）	GND	（12）	SDA（DDC）
（3）	B	（8）	GND	（13）	H SYNC
（4）	NC	（9）	NC	（14）	V SYNC
（5）	GND	（10）	GND	（15）	SCL（DDC）

CONNECTION WITH OTHER EQUIPMENT

Jacks and connections of rear panel

【The typical connection of rear panel 1】

Outside antenna or
CATV coaxial cable

RF adapter

HDMI

MONITOR OUT   INPUT 4   INPUT 3   INPUT 2   INPUT 1

Y/VIDEO

S-VIDEO

VIDEO

IR BLASTER

or

AUDIO

TV AS CENTER

FIXED/VARIABLE

IR BLASTER cable

or

or

L   R

INPUT

Stereo system

VIDEO   L   R

INPUT

VCR #2

S-VIDEO   VIDEO   L   R

OUTPUT

Laserdisc player,VCD player,
camcorder,etc

Remote control sensor

IR mouse

Y   C_B   C_R   L   R

OUTPUT

or

Y   P_B   P_R   L   R

OUTPUT

DVD/PDVD player,

HDTV SET TOP BOX,etc

Remote control sensor

IR mouse

S-VIDEO   VIDEO   L   R

ANT IN   OUTPUT

VCR #1

OTHER FUNCTIONS

【The typical connection of rear panel 2】

HDMI-HDMI

DVI-HDMI

or

HDMI Cable

DVI to HDMI Cable

HDMI Output

DVD Player or
HDTV STB

AUDIO OUT

DIGITAL OUTPUT

DVD Player or
HDTV STB
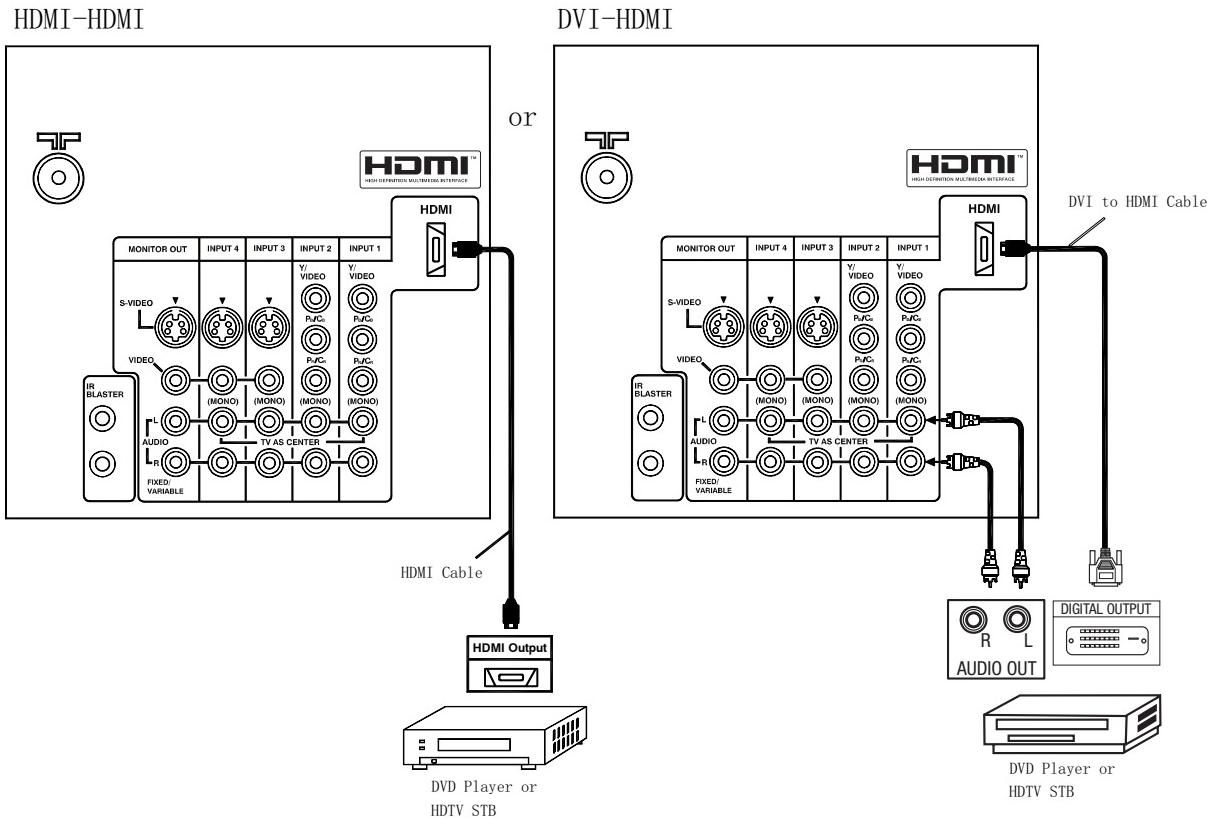
About HDMI
HDMI is the next-generation all digital interface for consumer electronics. HDMI enables the secure distribution of uncompressed high-definition video and multi-channel audio in a single cable. Because digital television (DTV) signals remain in digital format, HDMI assures that pristine high-definition images retain the highest video quality from the source all the way to your television screen.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Use the HDMI input for your external devices such as set-top boxes or DVD players equipped with an HDMI output connection as shown on the top.
**Notes:** 1. The HDMI input is not intended for use with personal computers.
      2. Only formats such as 1080i, 720p/60Hz, 576i, 576p, 480i and 480p are available for HDMI input.
      3. The HDMI input on **INPUT1** contains the copy protection system called High-bandwidth Digital Content Protection (HDCP). HDCP is a cryptographic system that encrypts video signals when using HDMI connections to prevent illegal copying of video contents.
      4. Connect the HDMI or DVI to HDMI connection cable from the output of the HDTV set-top box or DVD player to the HDMI input on the TV set as shown above. When using a component with DVI output, you also have to connect the AUDIO OUT (R/L) of the component to the AUDIO (R/L) of **INPUT1**.

CONNECTION WITH OTHER EQUIPMENT

【The typical connection of TV AS CENTER】

Stereo system,DVD player,etc
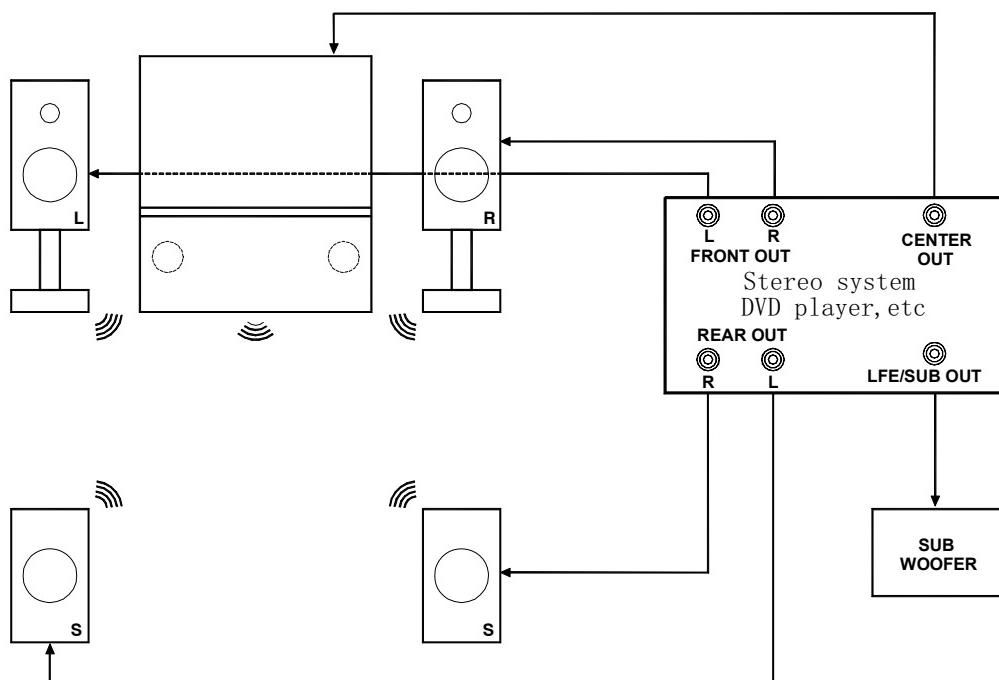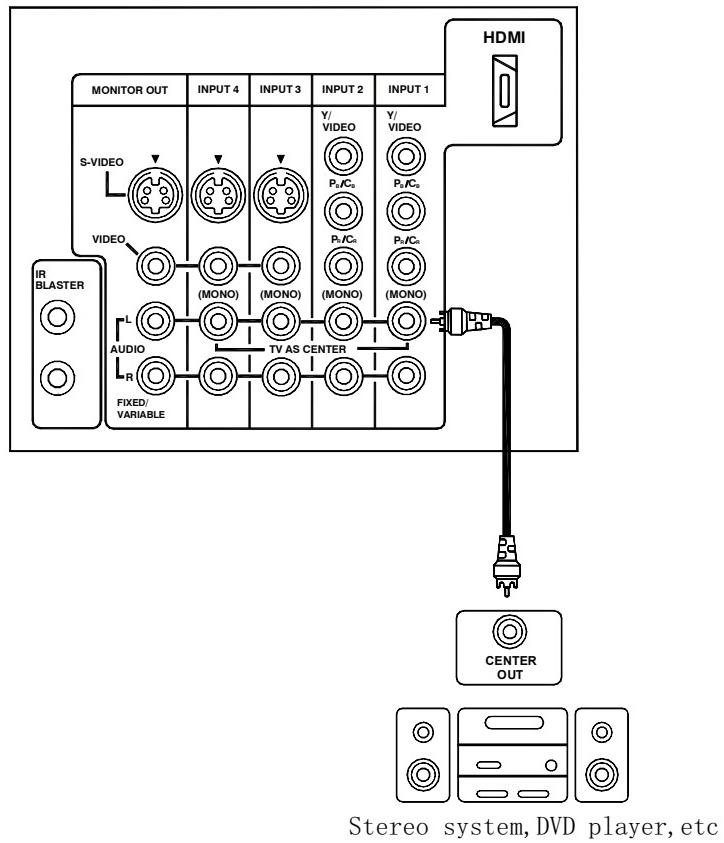
CONNECTION WITH OTHER EQUIPMENT

About the jacks and connections of rear panel

1. Refer to the operation manual of your electronic equipment for additional information on connections.

2. If your device has only one audio output (mono sound), please connect it to the left channel jack (MONO/L).

3. Audio and video signal from the same source should be connected to the same group of terminals. Do not mix them.

4. Terminals（Y/VIDEO,P_B/C_B,P_R/C_R）in **INPUT1** and **INPUT2** are used to connect component outputs of HDTV STB, DVD, PDVD, etc. Y/VIDEO input terminal can also be used as the standard video terminal.
   When you use Y/VIDEO, P_B/C_B, P_R/C_R terminals to connect component signals, press the RECALL button on the remote control unit to show the characters **COMPONENT** and **AV1** or **AV2** on the top right corner of the screen, which indicates that you are using component terminals to receive signals. However, when you use Y/VIDEO terminal instead of Y/VIDEO, P_B/C_B, P_R/C_R terminals to receive video signal, only the character **AV1** or **AV2** will appear on the top right corner of the screen.
   The HDMI input on **INPUT1** can be used to connect your external devices equipped with an HDMI output. When the HDMI on INPUT1 is connected, press the RECALL button on the remote control unit to show the characters **HDMI** or **DVI** and **AV1** on the top right corner of the screen, which indicates that you are viewing the program through the HDMI on **INPUT1**.
   Note: When the HDMI input on **INPUT1** is used, please do not connect terminals (Y/VIDEO，P_B/C_B，P_R/C_R) on **INPUT1**.

5. If your device has s-video signal output, please use s-video signal instead of the standard video signal.
   If there are signals input from the same group of S-VIDEO and VIDEO terminals, the TV will receive signal from S-VIDEO and the characters **S** and **AV3** or **AV4** will appear on the top right corner of the screen by pressing the RECALL button, which indicates that you are using S-VIDEO terminal to receive signals.

6. （VIDEO）MONITOR OUT terminal outputs video signal receiving from RF, S-VIDEO or VIDEO terminal to external equipment. When receiving component signals (Y，P_B/C_B，P_R/C_R) or HDMI signal, there is no output from （VIDEO）MONITOR OUT terminal.

7. （S-VIDEO）MONITOR OUT terminal outputs S-VIDEO signal receiving from S-VIDEIO inputs to external equipment. When receiving signals from RF, VIDEO, Y, P_B/C_B, P_R/C_R terminals or HDMI, there is no output from （S-VIDEO）MONITOR OUT terminal.

8. （FIXED/VARIABLE AUDIO）MONITOR OUT terminals provide fixed or variable audio level output to external stereo system.

9. TV AS CENTER input jacks
   These jacks are for stereo amplifiers with center signal output capability. This feature allows the TV speakers to be used as a center speaker.

10. IR BLASTER output jacks
    Refer to page 42-52 for the use of **AV NET** function through IR BLASTER output jacks.

ADDENDA

A guide to simple problem solving

・Before calling up the service personnel, please check the following chart for a possible cause to the problem you are encountering.

Symptom	Possible causes
No picture,no sound,power/standby indicator is OFF.	・The power cord is not plugged in.
No picture,no sound,power/standby indicator is ON.	・The TV is in standby mode.
No sound	・The volume control is set to minimum. ・The **Speaker** option in **Setup** menu is set to **Off**.
Twist image and poor sound	・The antenna signal is too weak or too strong. ・The TV is not tuned correctly.
Poor brightness, color or tint	・The contrast, brightness, color or tint may be misadjusted.
Snowy picture	・Interference from motorcycles, high-tension line, electric hair drier, personal computer or radio station.
Ghosts	・Check the direction, height or position of the antenna.
No color	・The antenna signal is too weak. ・**Color System** or **Sound System** is not set properly.
Remote controller does not work.	・The batteries in the remote controller may be exhausted. ・The batteries may be improperly installed. ・There is obstruction between the remote controller and the TV.

HITACHI Projection Television incorporates advanced power surge protection technology designed to protect against component or circuit damage due to external or internal power surges.
If your TV appears **A LOSS OF POWER**, please follow the following procedure:
1. Press the **POWER** button once.
2.If there is still no power, wait for 30 seconds and press the **POWER** button again.
3.If there is still no power, unplug the power cord from the wall outlet. Wait for 30 seconds and plug the power cord in. Press the **POWER** button again.
   The protective technology should provide you years of lasting entertainment from your HITACHI Projection Television.

The following phenomena are not failures:
（1）The picture takes a while to appear on the screen when the power is on.
（2）The cabinet clicks. The clicking is a creaking sound produced when the cabinet expands or contracts due to changes in temperature.
（3）Unevenness in color sometimes develops in part of the screen. Such unevenness in color may occur depending upon the nature or setting of the picture. The proper color may be restored by reducing the contrast or adjusting other settings.
（4）The TV set can generate sound distortion in external devices such as a radio. Please place the radio equipment away from the TV set.

Accessories

No.	Description	Quantity	C47-WD8000	C57-WD8000
1	Instruction manual	1	Yes	Yes
2	Remote control unit (CLE-962)	1	Yes	Yes
3	Battery (For CLE-962)	2	Yes	Yes
4	IR BLASTER cable	2	Yes	Yes
5	Caster holder	4	Yes	Yes
6	Antenna adapter	1	Yes	Yes

ADDENDA

Specifications

Model		C47-WD8000	C57-WD8000
Screen size		119cm	145cm
Power supply		Refer to the values as indicated on the rating label pasted at the back of the TV set.	
Power consumption			

Reception system	RF/VIDEO	PAL B.G/I/D.K SECAM B.G/D.K NTSC 50 M/NTSC NTSC3.58-5.5/6.0/6.5 NTSC4.43-5.5/6.0/6.5 PAL/SECAM 60					

	COMPONENT/HDMI	Total scan lines	1125i	750p	625p	625i	525p	525i
		Active scan lines	1080i	720p	576p	576i	480p	480i
		Vertical frequency（Hz）	50/60	60	50	50	60	60

Frequency range	44MHz-863 MHz	
Antenna input impedance	75Ohm non balance type	
Speaker	Φ13×2 , Φ5×2	
Sound output	20W×2	
Comb filter	3L（PAL）/3D（NTSC）	
Digital convergence	Yes	Yes
Magic focus	Yes	Yes
Perfect volume	Yes	Yes
NICAM/A2	Yes	Yes
BBE	Yes	Yes
SRS	Yes	Yes
P in P	Yes	Yes
Teletext	Yes	Yes
S-VIDEO INPUT	1（side）,2（rear）	1（side）,2（rear）
VIDEO INPUT	1（side）,4（rear）	1（side）,4（rear）
COMPONENT INPUT（Y, P_B/C_B, P_R/C_R）	2（rear）	2（rear）
HDMI INPUT	1(rear)	1(rear)
BRIDGE MEDIA	Yes	Yes
PC INPUT	Yes	Yes
AUDIO INPUT	1（side）,4（rear）	1（side）,4（rear）
MONITOR OUT	1(rear)	1(rear)
HEADPHONE OUTPUT	1（side）	1（side）
IR BLASTER OUT	2（rear）	2（rear）
FIXED/VARIABLE AUDIO OUT	1（rear）	1（rear）
Shielding	Yes	Yes
Weight	68Kg	84.5Kg
Dimension (mm)(width×height×depth)	1121mm×1223mm×485mm	1344mm×1412mm×530mm

Note:Specifications may be subject to change without notice for improvement.

HITACHI
Inspire the Next